

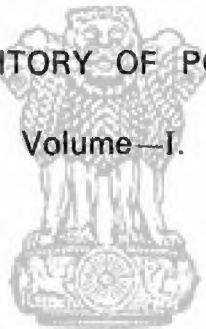
GAZETTEER OF INDIA



सत्यमेव जयते

UNION TERRITORY OF PONDICHERRY

Volume—I.



सत्यमेव जयते

Editor :

FRANCIS CYRIL ANTONY

1982

ADMINISTRATION OF THE UNION TERRITORY OF PONDICHERRY

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INTRODUCTION

The Gazetteer of the Union Territory of Pondicherry, the first ever to be written, is the outcome of the hard work put in by the Gazetteer Unit which was formed in the Directorate of Education. We in the Gazetteer Unit had no previous Gazetteer to fall back upon and draw the basic material required for writing the present one. This was in itself a challenge worth facing. A 14-member Advisory Board was set up on 10 April 1971 to advise the Unit and to offer some guide-lines for writing the Gazetteer. I took up this assignment on a full-time basis on 3 February 1972. Since then, it had been for us one continuous saga of adventure probing into the unknown of Pondicherry—the millennial meeting place of the East and the West.

This project was taken up as a Centrally Sponsored Scheme and was financed by the Government of India upto 1978-79. The work was carried out in two phases, the first confined to the collection of background material from different sources and the second, that of writing. As for the process of collecting the source material for the various chapters, we had to adopt different methodologies to meet the different exigencies as they arose. Although most of the chapters were written by us, the task of writing some of the chapters or portions thereof was entrusted to scholars in the respective field at the suggestion of the Advisory Board. However, some of the topics so decided to be entrusted to scholars, such as 'Social life' in Chapter III, 'Coins and Currency' in Chapter VI, as well as Chapter XIX on 'Places of Interest' ultimately fell on our shoulders as no suitable scholar could be identified to entrust the assignment. We have elsewhere duly acknowledged the various scholars who have contributed write-ups for the Gazetteer.

It may be mentioned that for the purposes of the Pondicherry Gazetteer, the whole Union Territory comprising Pondicherry, Karaikal, Mahe and Yanam has been treated as one 'district' although each region has been dealt with separately wherever possible. At the beginning of every chapter, is given a brief historical background especially from the time of the arrival of the French in Pondicherry in 1674 by way of introduction. This would not have been necessary had our job been merely to revise an earlier Gazetteer. The Pondicherry Gazetteer carries an additional chapter on 'Sri Aurobindo Ashram' which makes it unique among the District Gazetteers. This was also done at the suggestion of the Advisory Board.

I owe a word of explanation with regard to the spellings of village names adopted for this Gazetteer. On the advice of the Government of India we had to adhere to the spellings followed by the Survey of India which, it must be pointed out, are in some cases different from those followed by the Revenue Department as well as those in vogue in the area. In respect of those villages and places for which the spellings of the Survey of India are not available, we have been constrained to adopt those followed by the Revenue Department.

I wish to place on record our debt of gratitude to Dr. P. N. Chopra, Editor (Gazetteers Unit, Department of Culture, Govt. of India) whose understanding and advice was a source of great strength to all of us engaged in this project. I must also thank the Gazetteers Unit for the very valuable suggestions and corrections offered on the draft¹ sent to them for approval. I value so much the discussions I had with Dr. Emmanuel Divien who helped me get a clearer perspective of the different aspects of Pondicherry's unique history and culture. I must also thank him for furnishing me lists of source material and other bibliographical data whenever I needed them. I would also like to express my gratitude to Dr. David Annoussamy for offering me some insight into the cultural background of Pondicherry; to Thiru N. Sethuraman and Thiru P.L. Sami, I.A.S. for offering me very useful hints from time to time; to Dr. Joseph Minattur for making available some valuable reference material; to Dr. G. Thanikaimani for assisting me in editing the drafts on 'Flora' and 'Fauna'; to Dr. Jean Racine for seeing through the draft on 'Geology'; to Dr. François Gros for making available the books and records of the French Institute and Ecole Française D'Extrême Orient, Pondicherry for purposes of reference and consultation, whenever they were required by me or my staff; to Pulavar Kuppusamy for making available to me the findings of his own studies and personal explorations of temples and inscriptions in the Territory and to the several others who helped me in one way or other in the task of writing the Gazetteer under uncongenial circumstances.

The draft Gazetteer, sent to the Government of India was received back on 7 October 1978 with their comments, suggestions for corrections, etc. These were attended to and the final draft, running to about 1800 typed pages, was sent to the Government Press on 16 May 1979. They have done a nice job of it—a fact redounding to their own credit.

The following staff worked in the Gazetteer Unit since its inception :

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It would be difficult for me to spell out the specific tasks performed by each and everyone of those who worked in the Gazetteer Unit as it was essentially a team work. I must say that all of them evinced great enthusiasm and worked to the best of their ability and shared with me the excitement that was inherent in an endeavour such as this. I must, however, add that Thiru K. Rajaram, Selvi S. Nirmala Devi, both Museum Assistants, Selvi A. Micheline, Assistant Librarian (Grade III) and Thiru K. Manoharan, Junior Assistant, helped me in preparing the 'Index' and in proof-reading. Thiru M. Ramassamy, who left me on promotion, was kind enough to check the French spellings as and when the page proofs came in.

I have, at the same time, the satisfaction of having accomplished something enduring through this Gazetteer.

Dated : 1st December 1982,

FRANCIS CYRIL ANTONY,

Place : Pondicherry.

Editor.



सत्यमेव जयते

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Chapter I

Flora	..	Institut Français, Section Scientifique, Pondicherry
Fauna	..	Zoological Survey of India
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Fishes	..	Dr. K. C. Jayaramakrishnan
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Chapter XII

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Chapter XX

Sri Aurobindo Ashram	..	Prof. Manoj Das
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Photographs

..	Institut Français, Pondicherry
..	Sri Aurobindo Ashram Trust, Pondicherry
..	Sri Aurobindo Society, Pondicherry and
..	The Directorate of Information Publicity & Tourism

Maps

..	The Survey of India
	The Directorate of Planning and Research, Pondicherry

ABBREVIATIONS

A.A.	..	Archives Administratives
A.R.	..	Administration Report
B.O.	..	Bulletin Officiel des Etablissements Français de l'Inde
Diary	..	Diary of Anandarangapillai
J.O.	..	Journal Officiel de l'Inde Française Journal Officiel des Etablissements Français de l'Inde
km.	..	kilometres
m.	..	metres
Mal.	..	Malayalam
P.V.	..	Procès Verbaux
R.H.	..	Revue Historique del'Inde Française Revue Historique de Pondichéry
Tam.	..	Tamil
Tel.	..	Telugu

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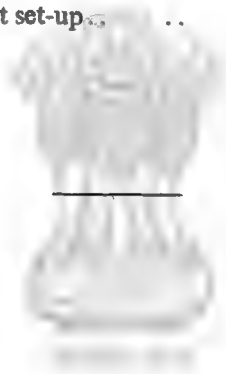
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CHAPTER—I

GENERAL

I. Introductory

The Union Territory of Pondicherry constituted out of the four erstwhile French establishments of Pondicherry, Karaikal, Mahe and Yanam (excluding Chandernagore) is not merely a creation of the Seventh Amendment of the Indian Constitution, but an outcome of a three-hundred year long history.

Pondicherry and Karaikal regions are embedded respectively in the South Arcot and Thanjavur Districts of Tamil Nadu. Yanam is a small area encircled by the East Godavari District of Andhra Pradesh. Mahe region is enclaved within the confines of the Cannanore District. While Pondicherry, 162 km. south of Madras and 22 km. north of Cuddalore is the Territorial headquarters, Karaikal, Mahe and Yanam are the regional headquarters of the respective regions. Karaikal lies about 150 km. down south and Yanam about 840 km. north-east of Pondicherry on the eastern coast of the Indian Peninsula. Mahe lies almost parallel to Pondicherry, 653 km. away on the west coast.

Pondicherry Region :

The name of the region is derived from the regional headquarters. Pondicherry is the corruption of *Pudicherry* which means a new hamlet. The bulk of Pondicherry region is an irregular stretch of land consisting of the Communes of Pondicherry, Mudaliyarpettai and Ariyankuppam in their entirety and the predominant parts of Ozhukarai and Villianur Communes, a big chunk of Nettappakkam Commune and a small chunk of Mannadipattu Commune. The villages of Sandikkuppam, Irisampalayam, Nallareddipalayam, Kilinjikkuppam, Pudukkuppam, Punjolaikkuppam and Singarakudi of Cuddalore Taluk enclaved in this area are surrounded by Mudaliyarpettai, Villianur and Ariyankuppam Communes. Besides the main area, the region's eleven enclaves lie scattered within Villupuram, Tindivanam and Cuddalore Taluks. The three isolated enclaves of Mannadipattu Commune lie on the west. One peculiar feature of Mannadipattu Commune is that the area surrounding Vadhanur village in Mannadipattu main enclave is a mixed Territory. Some of the plots in the area belong to Pondicherry and the others to

Tamil Nadu. Nettappakkam Commune has one isolated enclave towards the south-east. Villiyanur has a very small enclave, viz., the Manakuppam enclave close to the limits of Nettappakkam Commune forming part of the bulk. For the sake of convenience, all the eleven enclaves may be named as follows :

- | | | | |
|------------------|---------------------------------|-----|-----------------------|
| North : | 1. Kalapet enclave | } | Ozhukarai Commune. |
| | 2. Alankuppam enclave | | |
| North-
west : | 1. Suttukanni enclave | } | Mannadipattu Commune. |
| | 2. Sorapattu enclave | | |
| | 3. Mannadipattu main
enclave | | |
| West : | 6. Nettappakkam enclave | ... | Nettappakkam Commune. |
| | 7. Manakuppam enclave | ... | Villiyanur Commune. |
| South-
west : | 8. Karaiyamputtur enclave | } | Bahur Commune. |
| | 9. Manamedu enclave | | |
| | 10. Kaduvanur enclave | | |
| South : | 11. Bahur main enclave | ... | Bahur Commune. |

Thus from north to south these eleven enclaves skirt the main entity of Pondicherry almost in a semi-circle between $11^{\circ} 46'$ and $12^{\circ} 3'$ northern latitude and between $79^{\circ} 36'$ and $79^{\circ} 53'$ of eastern longitude. The region as a whole is bounded by the Bay of Bengal on the east and by the South Arcot District on all the other sides. The total area of Pondicherry and its eleven enclaves is 290 sq. km. with the total population at 3,40,240 according to the 1971 census.

The French first established their 'loge' in Pondicherry in 1674. In 1693, it was captured by the Dutch but restored in 1699 following the Treaty of Ryswick. The territory thus restored to the French, included Pondicherry Fort and its surroundings which were taken possession of by the French after paying the Dutch a sum of 16,000 pagodas which they asserted as having spent for acquiring the areas adjacent to the town.

In 1703, the village of Kalapet was obtained by François Martin from Nawab Dawood Khan, the representative of Aurangzeb, in order to obtain timber from the forests surrounding it for construction of houses in Pondicherry town. The same Nawab ceded the village group of Ozhukarai in 1706, the annual revenue of which amounted to nearly one thousand pagodas, as well as the village groups of Murungappakkam, Olandai, Pakkamudiyanpet and Karuvadikkuppam. The villages of Theduvanatham and Archivak (Abhishekapakkam), Odiyambattu and Tirukkanji were given as gift to Dumas by Nawab Safdar Ali in September 1740. 1

In 1750 following the victory of Ambur, Musafar Jung confirmed the grant of Villiyanur and added 36 villages of Bahur so that the advance posts were brought up to the Ponnaiyar. Since then, the French territories were besieged four times by the English. The first siege, under admiral Boscawen was unsuccessful. The second in 1761, resulted in the capture of the town. Following the Treaty of Paris signed on 10 February 1763, Pondicherry and its dependencies which included Ozhukarai, Ariyankuppam, Virampattinam, Murungappakkam, Pakkamudiyanpet, Olandai, Abhishekapakkam, Kommapakkam and Kalapet were restored to the French. It was again besieged and captured in 1778 and restored in 1785. It was captured a third time in 1793. Following the Treaty of Peace of 30 May 1814 the establishments were finally restored in 1816. The Treaty of 1814 provided for the restitution of all the settlements and factories which France had possessed in India as on 1 January 1792. These possessions were determined by the Convention concluded at Versailles on 31 August 1787 and by the Treaties of Peace (Versailles) signed on 3 September 1783 and previously on 10 February 1763. Thus by the Treaty of 1814, the French were allowed to retain only those areas which were in their possession in 1763.

Since then those establishments continued under French rule for one hundred and thirtyeight years, after which the French left the shores on 31 October 1954, following *de facto* transfer of power. This is also briefly the explanation for the scattered nature of Pondicherry and its various enclaves.

However according to some British Foreign Office records the British were eager to work out a rearrangement of boundaries which could convert Pondicherry into a single compact block so as to prevent smuggling and check criminals. Various suggestions emanated from the Government of India for the rectification of the boundary. However nothing came out of it.

Karaikal Region:

The name of the region is derived from the regional headquarters. Karaikal region lies between 10° 49' and 11° 01' northern latitude and between 79° 43' and 79° 52' eastern longitude about 150 km. further south of Pondicherry, isolated within the Thanjavur District bounded on the east by the Bay of Bengal. It is bounded on the north by the Nandalar and on the south by the Vettar. This region with an area of 161 sq. km. has a population of 1,00,042 as per the 1971 census. Karaikal town about 16 km. north of Nagappattinam and 9 km. south of Tarangambadi is the regional headquarters.

Karaikal region is made up of the Communes of Karaikal, Kottuchcheri, Nedungadu, Tirunallar, Niravi and Tirumalarajanpattinam. It is surrounded by Mayuram Taluk on the north, and Nannilam Taluk on the east. The southern fringe of Tirumalarajanpattinam Commune touches the boundary of Nagappattinam Taluk in Thanjavur District. The Communes are so spread out that Karaikal is located at the centre with Kottuchcheri on the north, Nedungadu on the north-west, Tirunallar on the west, Niravi and Tirumalarajanpattinam on the south. Niravi Commune is made up of two detached areas separated by the territory of Nannilam Taluk, but aligned to Tirunallar Commune with the easterly flow of Arasalar forming the Commune boundary. Three small isolated enclaves of Thanjavur District are embedded within the detached enclave of Niravi Commune. In the Commune of Tirumalarajanpattinam the village of Padudarkollai lies detached, enclaved within the Nannilam Taluk.

Several explanations are offered for the name Karaikal. There is no doubt that it is a combination of two words, 'karai' and 'kal'. Both 'karai' and 'kal' have several meanings, of which the more plausible one being "a canal made of lime mixture". The traces of such a canal, however are nowhere evident now. According to Julien Vinson, the town is said to have been known as Karagiri in Sanskrit.² The Imperial Gazetteer gives to the name of the town the meaning of a 'fish pass'.

The Kasakkudi plates dated in the 22 year of Nandivarman Pallavamalla (C 731-796) were found at Kasakkudi not far from Karaikal. This shows that this area formed an integral part of the Pallava kingdom in the eighth century. A reading of the Kasakkudi plates provides us with a glimpse of a highly developed society which flourished in the area.

Poet Sekkizhar (992-1042) describes the town as 'வங்க மலிக் கடற் காரைக்கால்', the 'Karaikal of many vessels on the coast' in his *Peria puranam*.³ In that the poet relates the life story of one Punithavathiar who abandoned the pleasures of material life and devoted herself entirely to a life of prayer and penance to signify her devotion to Lord Siva. He called her 'Karaikal Ammayar', conveniently after the town which must have been famous already. Significantly, Jouveau Dubreuil points out that Karaikal is mentioned in a copper plate inscription preserved in the Museum of Leyde University in Holland. The copper plate records the grant of certain privileges to a Buddhist monastery at Nagappattinam.⁴ It refers to a highway named after Karaikal as the western boundary of this Monastery. If the highway should be named after Karaikal the conjecture is that it must have been a prominent town in those days. Jouveau Dubreuil also concludes that Karaikal was 'la capitale du pays au nord de Negapatam'. The period that followed is, however, shrouded in darkness.

Karaikal and its surrounding areas formed part of the Mayuram Subha of Thanjavur country under the first Mahratta ruler Yekoji since 1675.

But soon after the arrival of the French in Pondicherry, François Martin is known to have sent an envoy to the King of Thanjavur seeking permission to set up an establishment in his kingdom. This as well as the mission sent in 1688 did not bring any success.

In 1738, again Dumas negotiated with Sahuji of Thanjavur for Karaikal, the fortress of Karakalachcheri and five villages on payment of 40,000 chakras. The *Conseil Supérieur* met on 10 July 1738 and approved the treaty. Even before the French could take possession of the town and the villages, Sahuji backed out of his promise on the convenient pretext of Dutch objection. Chanda Saheb in an attempt to demonstrate his allegiance to the French offered to march his own troops upon Karaikal. The troops led by Francisco Pereira, a Spaniard in the service of Chanda Saheb with French interest at heart, took the town and the fort in no time. Karaikal, the fort of 'Karkalanjeri' and the adjacent territory were made over to the French. 5

On 14 February 1739, Gratien Golard took possession of Karaikal town, the fort of Karakalachcheri and eight dependent villages. Although Chanda Saheb's Thanjavur expedition did not achieve its purpose, he wished to confirm the grant of Karaikal to the French. This was enough for the King of Thanjavur who raised his price for the town of Karaikal and the fort of Karakalachcheri to 50,000 chakras. He also demanded a loan of 1,50,000 chakras without interest repayable in three years against the hypothecation of Mayuram lands and an annual rent of 4,000 pagodas for five villages. The *Conseil Supérieur* agreed to all the terms except to the payment of 1,50,000 chakras which was reduced to 10,000 chakras while the annual rent was reduced to two or three thousand chakras. The villages so received were Kilaiyur, Melaiyur, Pudutturai, Kovilpattu and Tirumalarajanpattinam. The *parwana* of Chanda Saheb dated 1 July 1739 ceded to Dumas, the two villages of Niravi and 'Conde' situated south of Karaikal. 6

Troubles started again in the Kingdom of Thanjavur, and Sahuji lost his throne in a domestic revolution. Pratap Singh who succeeded to the throne renewed the demand for a loan of 1,00,000 chakras. On receipt of the first instalment of 40,000 chakras, he assigned eight more villages to the French, viz. Codague (Kondagai), Vanjiyur, Arinullimangalam, Niravi, Dharmapuram, Oozhiapattu, Mattakudi (probably Mattalangudi) and Polagam. On 5 January 1740, the village of Arinullimangalam was exchanged for Courtallam (Kutralam).

On 12 February 1740 Pratap Singh sold for 60,000 chakras these eight villages which he had assigned only the previous year for a sum of 40,000 chakras. The same year he pledged Tirunallar *maganam* for a sum of 55,350 chakras (equivalent to Rs. 82,000). He also pledged 33 villages for a sum of 60,000 chakras. In July 1741 a *parwana* was received from the Mughal Emperor, confirming the right to the French over Karaikal and the five villages.*

Relations with the Thanjavur Court, however, became strained shortly after. Nevertheless Febrier, successor to Gratien Golard, managed to exchange 'Codague, Thencoutralam and Mattakudi', for Kovilpattu, Vadamarakadu, Kil Kasakkudi and Talatteruvu which increased the number of villages sold from eight to nine. By a treaty signed on 12 January 1750 Pratap Singh ceded to the French 81 villages around Karaikal and cancelled the annual rent of 2,000 pogodas (Rs. 7,000) payable for the villages. This was all the territory the French possessed in the Thanjavur country when they surrendered to the English in 1761. The territory then passed twice to English control in 1783 and 1797 after which it was finally restored by John Thackerey, the Collector of Thanjavur to Comte de Beranger on 14 January 1817. The French held it until they left the colony in October 1954.

Mahe Region:

The name of the region is derived from the regional headquarters. It consists of three entities, i.e., the town of Mahe proper, the small enclave of Kallayi and the northern enclave of Naluthara.

The town proper lies south of River Mahe near its juncture with the sea. The Naluthara enclave lies between the small Ponniyam river on the north and the Kozhikode-Tellicherry road in the south. In between these two lies the small enclave of Kallayi. The entire region is treated as a Commune for purposes of municipal administration.

Mahe region is situated between 11° 42' and 11° 43' northern latitude and between 75° 31' and 75° 33' eastern longitude on the Malabar coast, with Mahe town on the northern extremity of Badagara Taluk of Kozhikode District in Kerala, and the other two entities enclaved within the Cannanore District of Kerala. The entire region covers an area of 9 sq. km. and has a population of 23,134 according to the 1971 census.

* Kilaiyur, Melaiyur, Kovilpattu, Pudutturai, Tirumalarajanpattinam.

Mollandin who was the Chief of the Calicut loge requested Boyanur, the Prince of Badagara in 1721 to grant two sites, one on the bank of the river to construct a warehouse and the other on a small hill to build a fortified loge. Boyanur agreed without difficulty to the construction of the warehouse. 'As for the hill it was the cemetery of the Moors and it was not possible to cede it.' A treaty was signed between the Vazhunnavar of Badagara and the French India Company on 2 April 1721 for the cession of the port near the mouth of the river with the right to maintain a garrison. Shortly after, the English persuaded the Boyanur to push the French out of Mahe. The French temporarily withdrew to Kozhikode. But the Marquis of Pardaillan recovered it with a fleet of six ships on 23 December 1725. The clever assault was planned by Mahe de La Bourdonnais. As an acknowledgement of the skill and enterprise of his young Captain, the Commodore, by a slight alteration of the letters which went to form the name of the captured town transformed it from the Indian 'Maihe' or 'Mahi' into the French 'Mahe' – the first name of La Bourdonnais. Malleson says that this new name not only took root, but it gradually effaced the recollection that the town had ever borne another. 7

Now to continue the story of the first acquisition of Mahe, a Treaty of Peace was signed between Mollandin and Boyanur on 8 November 1726. In 1752 the French purchased from the Raja of Chirakkal the ports of Ramaturti, Kavai, Nileschwaram and Mattalaye and in 1754 Mount Dilli from the same potentate. However with the surrender of Mahe in February 1761, the possessions fell into the hands of the English, and with the exception of the fort at Mount Dilli which was placed in charge of an European sergeant, all the other fortifications were razed to the ground. Mahe was restored to the French in 1765, but it was, with its surrounding dependencies, again captured by the English in 1779 and restored in 1785. It was for a third time taken in 1793, and was finally given back, alongwith the small factory in Kozhikode on 22 January 1817.

Captain Philibert took possession of the settlement from Vaughan, Collector of Malabar. There was some dispute between the parties, the French claiming large territories which they possessed in 1792 by virtue of the concessions made by Tipu and by the neighbouring Nayar Princes and the English refusing to hand over anything more than the town of Mahe. 8

The restitution of Naluthara, consisting of Chalakara, Pallur, Chembra and Pandakkal took place only in the year 1853. According to the Malabar Manuel, the Board of Revenue, in its proceedings dated 28 September 1846 directed the delivery to the French Government, of the villages of Chalakara,

Pallur, Chembra, Pandakkal as also the detached points called Fort. St. George and the great and small Kallayi. These were accordingly handed over by J. D. Robinson, Head Assistant Collector, to Hayes, Chief of Mahe on 14 November 1853. ⁹ Chalakara, Pallur and Chembra formed the demesne of the Nambiars of Iruvalinad and Pandakkal of the Kurungottunayar and the four villages together constituted the *amsam* of Naluthara (in Kottayam Taluk). Mahe region consisted of the following *desams* in Malabar :

- | | | |
|----------------|------------------|---------------|
| 1. Valiyangadi | 6. Valavil | 11. Chalakara |
| 2. Parakkal | 7. Puliyl | 12. Pallur |
| 3. Mundokkil | 8. Mattammal | 13. Chembra |
| 4. Manchakkal | 9. Odathinakam | 14. Pandakkal |
| 5. Chudikotta | 10. Valappinakam | |

Logan gives also the details of the four villages as follows :

East : Part of Pannianur, Peringalam, Olavilam and Kallayi *amsam*.

West : Tiruvangad and Kallayi *amsam*.

North : Ponniyam river and part of Pannianur *amsam*.

South : Part of Olavilam and Kallayi *amsam*.

Of the three detached points, which communicate with each other.

North : The strip of Kallayi lying between them and Vera Kunnu.

South and south-west : A strip of Kallayi *amsam* intervening between them and Mahe river and a portion of Tellicherry.

East : A mosque and precipice.

West : A portion of Tellicherry road and a strip of Kallayi *amsam* intervening between them and Kanian Kunnu.

The French '**loge**' in Kozhikode adjoining the old District Jail covered an area of 'six acres' on the sea-shore about 'half a mile' north of the Kozhikode lighthouse. This **loge** was restored to the French on 1 January 1819.

Yanam Region:

The name of the region is derived from the regional headquarters. It is situated on the east coast of the Indian Peninsula between 16° 42' and 16° 46' northern latitude, and between 82° 11' and 82° 19' eastern longitude bounded on all sides by the East Godavari District. The town of Yanam lies on the spot where the River Coringa branches off from Godavari. The Coringa itself divides the town into two parts. The entire region, consisting of Yanam town and six villages is treated as a Commune for purposes of local administration. The region which covers an area of 20.0 sq. km. has a population of 8,291 according to the 1971 census.

A *parwana* from Haji Hassan Khan authorised the French Representative Fouquet, then chief of the Company at Machilipatnam to set up a '**loge**' at Yanam in the year 1731. The sovereignty of the French over the territory was confirmed by Musafar Jung, the Nizam of Hyderabad in 1750. The place was formally ceded to them only two years later. Like all other settlements Yanam too fell thrice into the hands of the British. After the Napoleonic wars, Yanam along with the factory at Machilipatnam was finally returned to the French early in 1817.

Administrative Sub-division:

The five establishments of Pondicherry, Chandernagore, Karaikal, Mahe and Yanam and the **loges** at Machilipatnam, Kozhikode and Surat were under French rule since 1816.

Until 1880 the five major establishments had a **Conseil Local** each. As per the **décret** of 12 March 1880 the five settlements were divided into ten communes as follows :

- | | |
|----------------|---|
| 1. Pondicherry | 6. Nedungadu |
| 2. Ozhukarai | 7. Grand' Aldée (Tirumalarajan-pattinam). |
| 3. Villiyanur | 8. Chandernagore |
| 4. Bahur | 9. Mahe |
| 5. Karaikal | 10. Yanam |

As the areas of the communes were found too large for municipal administration, the regions were reorganised into 17 communes with effect from 21 February 1908, in accordance with the decree of 25 December 1907, subsequently amended by the decree of 12 February 1908.

- | | |
|--------------------|-------------------|
| 1. Pondicherry | 10. Niravi |
| 2. Ozhukarai | 11. Grand' Aldée |
| 3. Ariyankuppam | 12. Tirunallar |
| 4. Mudaliyarpettai | 13. Nedungadu |
| 5. Villiyanur | 14. Kottuchcheri |
| 6. Tirubhuvanai | 15. Mahe |
| 7. Bahur | 16. Yanam |
| 8. Nettappakkam | 17. Chandernagore |
| 9. Karaikal | |

The **loges** which were not more than market centres continued under the French with a semblance of sovereignty till 6 October 1947 when they relinquished their right over the **loges**.

In a referendum held on 19 June 1949 the people of Chandernagore overwhelmingly voted for merger with India. On 14 August 1949 on the eve of the second anniversary of India's independence, France agreed to transfer Chandernagore to the Indian Union. The *de facto* transfer of Chandernagore to the Indian Union took place on 2 May 1950. On 2 February 1951 the Indo-French Treaty for the cession of Chandernagore to India was signed in Paris and an Indian Administrator was appointed to take charge of the town on 2 February 1951. Under the Chandernagore (Merger) Act, 1954, Chandernagore merged with West Bengal and was declared the headquarters of a sub-division of Hoogly District with effect from 2 October 1954. Following the merger of Chandernagore, there remained only 16 communes.

According to the 1971 census, Pondicherry, Ozhukarai and Mudaliyarpettai in Pondicherry region, Karaikal, Mahe and Yanam in the respective regions have been declared as towns. The number of census villages (commune-wise) during 1961-71 and the number of revenue villages are given below :

Commune		Census villages (1961)	Census villages (1971)	Revenue villages
(1)		(2)	(3)	(4)
1. Pondicherry	.. ..	20	—	1
2. Mudaliyarpettai	.. ..	20	2	5
3. Ozhukarai	.. ..	49	33	8
4. Ariyankuppam	.. ..	20	20	6
5. Villianur	.. ..	49	49	20
6. Nettappakkam	.. ..	27	27	8
7. Mannadipattu	.. ..	40	40	19
8. Bahur	.. ..	42	42	14
9. Karaikal	.. ..	8	8	5
10. Kottuchcheri	.. ..	16	16	6
11. Nedungadu	.. ..	33	33	5
12. Tirunallar	.. ..	38	38	11
13. Niravi	.. ..	13	13	5
14. Tirumalarajanpattinam	.. ..	10	10	5
15. Mahe	.. ..	3	3	5
16. Yanam	.. ..	—	—	6
Total	.. ..	388	334	129

It could be seen that under the 1971 census the 20 census villages in Pondicherry Commune have been treated as urban and counted as part of Pondicherry town. Eighteen census villages in Mudaliyarpettai Commune have been treated as urban to form the new Mudaliyarpettai town. Seventeen census villages in Ozhukarai Commune have been treated as urban to form the new Ozhukarai town.

II. Topography

Pondicherry Region:

The region is a flat country of average elevation of about 15 metres above sea-level, intersected by the deltaic channels of River Gingee and the Ponnaiyar and other streams forming the two main drainage basins, interspersed with lagoons, lakes and tanks. To the north-west of Pondicherry town, a girdle of low hills (or an elevated ground of about 30 metres high) is noticed to extend in a E.N.E.-W.S.W. direction. This high ground suddenly emerges from the low lying alluvial plain country. Known as "**Les Montagnes Rouges**" or the "Red Hills of Pondicherry", or Gorimedu, probably so named after the memorials put up during the first siege of Pondicherry (1760) this forms the most prominent feature in the landscape. River Gingee crosses the region diagonally from north-west to south-east. Ponnaiyar forms the southern border. Actually the alluvial delta of Ponnaiyar is almost on dead level ground, only a few metres above the sea. To the north-west of these hills is a section of fossiliferous limestone formations of the Cretacian age. To the south of this area is situated the alluvial tract of Varahanadi (Gingee) and to the north is the recent alluvium.

The Pondicherry area is said to mark the northern limit of the sediments laid down during the great Cenomanian marine transgression along the east coast of South India. ¹⁰ According to geologists this high ground might have been formed due to faulting and upliftment along a plane extending in a general E.N.E.-W.S.W. direction. The Muttirapalaiyam water wells which yield plentiful water may be lying along the plane of the postulated fault. According to them the lateritised scrap of the Cuddalore rocks west of Kalapet may also be representing a fault which, when extended, joins the Red Hills.

Black clays simulating marine clays have been observed in well cuttings to the west and south-west of Pondicherry with local intercalation of peaty materials and sands. The persistence of this horizon over a considerable area is said to be suggestive that the area at one time must have been a lagoon. There are evidences to show a gentle submergence along the east coast perhaps during the pleistocene times. During the periods several changes seem to have taken place including the change of course of certain rivers. According to geomorphologists the straight shore line is also suggestive of some structural dislocation. Shallow bays were formed during the submergence the limits of which may be traced from the presence of black sticky clays recorded in the area.

The unusual thickness of alluvium near Pondicherry (which is stated to exceed 167 metres) is said to be indicative that it was part of an extensive lagoon which has since been silted up and uplifted. Near Pondicherry, beds of peat at various levels below the surface of the ground have been recorded which also proves that there has been subsidence. 11 The presence of a shallow lagoon along the east coast which has since been filled up to give rise to the present continuity of land, has been recorded. The coastal border has a length of 22 km. with a breadth ranging from four to six hundred metres. Superficially the coast is flat and sandy.

From the above description it will be evident that Pondicherry region consists of four geographical zones. The coastal zone comprising newer and older dunes including saline areas of clayey texture. The second zone is made up of the two plateaux called the Pondicherry plateau and the Tiruvakkarai plateau composed of a geological formation called the 'Cuddalore sandstones'. The upper layers are made up of red transported ferrallitic soil. The Valudavur plain lies between these two plateaux. Marshy depressions are also frequently encountered in the plains of Valudavur. The flat alluvial zone occupies the rest of the Pondicherry region.

Karaikal Region:

Forming part of the fertile Kaveri delta, the region is completely covered by the distributaries of Kaveri. Covered completely by a thick mantle of alluvium of variable thickness, the lie of the region is flat having a gentle slope towards the Bay of Bengal in the east. It is limited on the north by the Nandalar and on the south-east by the Vettar. The group of rocks known as Cuddalore formations is met with in the area contiguous to Karaikal region in Thanjavur District.

Mahe Region:

Mahe is a small area bounded on the south-west by the Arabian sea, on the north by the River Ponniyam (Moolakadavu) and on the other sides by a stretch of calcareous hills of medium height which are linked to the ghats by a series of wooded hillocks. The River Mahe which flows towards the west, divides the region into two parts.

Yanam Region:

The region is bounded on the east and south by River Godavari which discharges itself into the Bay of Bengal after flowing about 14 km. towards south-east. The town of Yanam is located at a spot where the River Coringa and the Godavari separate to divide the region in two parts, one on the east and the other on the west. The entire region is composed of a flat, monotonous terrain without any distinct topographical feature.

III. River system and water resources

Gingee river : Pondicherry and its surrounding enclaves lie on the drainage basin of Gingee river crossing diagonally from north-west to south-east. This river is also called 'Varahanadi' presumably after Varaha, the *avatar* of Vishnu. Sankaraparani Ar or the 'ornament of Sankara' is the other name by which the same river is known. It takes its sources on the western borders of Gingee Taluk and is made up of two affluents at its head, one emanating from Pakkamalai Hills in the south-west and the other from Melmalayanur tank fed by the Malayanur Hills in the north-west zone of Gingee Taluk. Both these streams join together and the combined river flows in an easterly direction, then takes a turn towards the south on the eastern borders of Singavaram village, crosses the Tindivanam—Tiruvannamalai road near Gingee and then turns again towards the east. At this reach it takes in the Nariar tributary. Lower down, the Tondiar tributary flowing from the east joins Gingee, a little north-east of Vidur in Tindivanam Taluk (South Arcot District). The Pambai Ar joins a little north-west of Elayandapattu before the river crosses the western border of Mannadipattu enclave of this Territory.

At a distance of about six km. from its mouth, the river breaks off into two branches better known as Ariyankuppam river in the north and Chunnambu Ar or Kilinjalar in the south. The Ariyankuppam river finally empties into the sea north of Virampattinam and Chunnambu Ar a little south of Chinna Virampattinam. Although the total length of the river is 78.89 km. it has a run of only about 34 km. in the region. This is not a perennial river with flow only during rains and floods.

Ponnaiyar: Ponnaiyar is referred to as 'Then Pennai' in Tamil literature. In Sanskrit it is called 'Dakshina Pinakini'. The word 'Pinakini' is derived from the word 'pinaka' which means the bow of Siva.

The Ponnaiyar, originating from the Nandidurga Hills of Karnataka, runs a distance of about 89 km. before entering Tamil Nadu near Hosur. From there it runs another 177 km. in Salem District, about 34 km. in North Arcot District, and about 122 km. in South Arcot District and falls into the Bay of Bengal about four km. north of Cuddalore.

In olden times the flow of Ponnaiyar used to be harnessed for purposes of irrigation through a system of *korambu* which consisted of an earthen bank across the river in an inclined position with its upper end towards upstream to draw off supplies and to lead water into off-take channels.

In recent times however a number of irrigation works have been built across the river. Mention may be made of Krishnagiri Reservoir, Aliyar Dam and Nedungal Anicut in Salem District, Sathanur Dam, Tirukkanur Anicut (pick-up anicut), Tirukkoyilur Anicut and Ellis Choultry Anicut in South Arcot District.

The Kuduvaayar which branches off from the Ponnaiyar enters the territorial limits of Pondicherry a little north of Kilur and merges with Chunnambu Ar (or Kilinjalar) near Tirukkanji, a little west of Pondicherry—Cuddalore road. The flow of Kuduvaayar which runs a distance of 16.2 km. is harnessed for irrigation by the anicuts at Kilur, Mangalam and Tirukkanji.

The Malattar which takes off from the Ponnaiyar north of Valavanur in Villupuram Taluk, touches the southern fringes of Nettappakkam and Ariyankuppam Communes before it falls into the Bay of Bengal near Pannittittu after running a distance of 28 km. The three diversion works built across Malattar, viz., Idayar Anicut, Sellenjeri Anicut and Kumaramangalam regulator serve the agglomeration of Nettappakkam and Ariyankuppam Communes.

The Mooliar is an outspread of the lagoon formed near Pudukkuppam.

Kaveri : The River Kaveri emerging from the western ghats near Madikeri (Mercara) in Kodagu meanders through several hundred km. across Karnataka and Tamil Nadu before it falls into the Bay of Bengal. At the head of the delta about 16 km. west of Tiruchchirappalli, the river bifurcates as Kaveri and Coleroon. The former serves as an irrigation canal and the latter as a flood carrier. Seventeen miles below at Grand Anicut, the Vennar branches off from Kaveri. The Grand Anicut also takes off from the same place. From this point onwards the Kaveri divides and sub-divides itself into a number of tributaries. The main branches of Kaveri below Grand Anicut are the Kodamurutti, Arasalar, Virasolanar and the Vikramanar. Although Arasalar and its branches spread through Karaikal, the waters of Kodamurutti and Virasolanar also meet the irrigation needs of the region.

The Arasalar having a total run of 24 km. enters Karaikal region, a little east of Akalanganni. It forms the natural boundary line separating Niravi Commune from Tirunallar on the north-west and Karaikal on the north-east. In 1855 however, the Arasalar is known to have changed its course within the limits of Karaikal Commune. It runs a distance of 11.97 km. in Karaikal region before entering the Bay of Bengal. The construction of Kannambadi Dam in 1916 and Mettur Dam in 1932 has reduced the flow of water in Arasalar.

The Nattar, branching off from Arasalar at Sakkottai in Thanjavur District, runs a distance of 11.2 km. in a south-easterly direction across Nedungadu and Kottuchcheri Communes before emptying itself into the sea.

The Vanjiar fed by Arasalar, takes its course along the northern boundary of Tirunallar Commune, drops on a south-easterly curve towards Karaikal Commune and merges with the Arasalar, south-east of Karaikal town after covering a distance of about 9 km.

The Nular, also fed by the Arasalar, runs a distance of 13.77 km. before it joins Vanjiar north-east of Karaikal town.

The Puravadaianar and the Tirumalarajanar are the branches of Kodamurutti. Fed by the waters of Kodamurutti, Puravadaianar runs through Tirumalarajanpattinam Commune for a distance of 5.3 km. before it empties itself into the sea, south-east of Melvanjiyur. The flow of Tirumalarajanar which forms the natural boundary line between Niravi and Tirumalarajanpattinam Communes runs a distance of 5.13 km. before it enters the sea, north of Pattanachcheri.

The Nandalar takes off from Virasolan and meanders across the northern boundary of the region through Nedungadu and Kottuchcheri Communes for a distance of about 15.15 km. before it finds its outlet into the sea a little south of Tarangambadi.

River Mahe : The Mahe river gathering the flows around Velliyod, Naripatta and Kavilumpara *amsams* adjoining the western ghats, runs a distance of about 55 km. towards the west emptying itself into the sea, north of the hill by the side of the Administrator's residence. The river forms the northern boundary of Mahe town, separating it from the enclaves of Kallayi and Naluthara on the north. Though not useful for the purpose of irrigation it is navigable in all seasons upto Parakkadavu (in Kerala) some 19 km. further upstream. During summer it is not navigable beyond Parakkadavu.

The flow of Eranholi river runs near about the northern boundary of Mahe region, alongside the Tellicherry—Panur road. The Moolakadavu which takes off from Eranholi river, a little east of the Tellicherry—Pandakkal—Panur road trijunction, runs a little south of the fringes of the north-north eastern boundary of Pandakkal.

River Coringa : Coringa river which is a branch of Gautami Godavari runs along Yanam. The Kotipalle or Bank Canal which starts from the Dowleswaram Dam on the Godavari near Rajamundry runs towards east upto Pillanka wherefrom it takes a north-easterly course. From Pillanka the water of the Bank Canal is brought to Yanam through a small canal known as the Pillanka Kaluva or French Channel. In Yanam, 'Pillanka Kaluva' branches off into two channels, i.e., the Meraka Kaluva or Panta Kaluva and Pallapu Kaluva or Outa Kaluva. The former is a discharge channel and the latter an irrigation channel. Ultimately both the channels join the Coringa river, the northerly flow of which divides the town into two.

Underground water resources:

Pondicherry Region : The ground water resources of Muttirapalaiyam first came to be utilised as early as in 1863 for providing good drinking water for the population of Pondicherry town.¹² From an inscription found on a tablet immediately north of the big temple in Bahur we learn that an artesian well was sunk there as early as in 1881-1882.¹³ The success of the artesian borings of Pondicherry and the efforts of Poulain, 'enterprising manager of the Savana factory' have also attracted the attention of the Geological Survey of India even before 1881.¹⁴ The existence of "three artesian wells in continuous operation within a circle of 600 yards radius, close to the sea" is also reported in the Records of the Government of India. In one case artesian water is said to have risen to a height of 15 feet above sea-level. Details of the three artesian wells are given below :

Position	Depth in feet	Discharge (Gall. per minute)	Diameter of tube (inches)	Temperature F.h.
1. Savana ..	174	30	5.57	91.4
2. Uppalam ..	119	100	7.08	—
3. Botanical Garden ..	261	146.5	10.23	93.74

It is thus evident that ground water has been under continuous exploitation for more than hundred years in Pondicherry region. With the improvement in the supply of electricity, tube-wells have been on the increase. Tube-wells are the chief sources of protected water supply for many villages in the region. Pondicherry town is fed by the water works at Muttirapalaiyam,

Ellupillaichavadi and Muttiyalupettai where sub-artesian aquifers in the Cuddalore sandstones have been tapped in tube-wells. There are also some natural seepages locally called '*Madagu*' about 3 km. north-west of Pondicherry town which augment water for irrigation. It is only in the north-western portion of the region, especially in the area occupied by the Cretaceous formations that ground water scarcity is felt.

The general water table in the region is said to be shallow, about 3 to 4.5 metres. It drops down by a few metres in the lean months. Artesian and sub-artesian aquifers are commonly encountered, particularly in the coastal strip between Pondicherry and Cuddalore. They occur both in the alluvium and in the Cuddalore sandstones underlying it. In the former, the loose and incompacted sands occurring as thick layers with black clays are water bearing and yield plenty of water. They are generally met within a maximum depth of about 50 metres but in the 'Cuddalores' they lie at a depth of about 125 metres.

The alluvium appears to have a thickness varying from 15 metres to as much as 68 metres. The confined aquifers in the alluvium generally occur between depths of 15—27 metres, and 33—42 metres and these are mostly developed for irrigational use. The piezometric surface of water in these confined aquifers generally varies from 0.6 to 3.7 metres below ground level. But in certain localities close to the coast, such as Pondicherry, Thengathittu and Ariyankuppam, the piezometric surface is above the ground level resulting in artesian conditions.

Around Pondicherry, Thengathittu and Ariyankuppam artesian aquifers are encountered at depths between 20 and 45 metres with many artesian wells around Thengathittu. In the area between Tavalakuppam and Reddichavadi and around Abhishekapakkam and Kattupalayam, artesian aquifers in the Cuddalore formation have been tapped. The water from the artesian aquifers is generally alkaline with a slight sulphurous smell and is stated to damage the casting pipes leading to collapse of the sides of the tube-well and stoppage of flow. In the rest of the region sub-artesian conditions are commonly observed.

Many of the artesian wells which gave rise to water column of 1.2 to 1.5 metres above ground level have now become sub-artesian or just over flow. Due to heavy pumping of ground water only a few wells around Pondicherry flow round the year.

The endurance of the flow in the tube-wells in the coastal alluvial flats around Pondicherry and further south is suggestive that the source for this water must be in the alluvial plains further west of the area, through which the River Gingee flows. It is possible that Usteri which stores a large amount of water of the Gingee may be playing its part in maintaining a constant hydrostatic head.

In the Red Hills and in the area called Dhanwantarinagar to the north and north-west of Pondicherry town occupied by the Cuddalore formation, the depth of water table varies from 5 to 12 metres.

Bore hole data indicate that the maximum thickness of the Tertiary formations is not less than 125 metres. Dug-cum-tube-wells and tube-wells tap ground water from the sandstone aquifers and the yield varies from 340 to 570 litres per minute

The Cretaceous formations occurring in the north-west part of the region also consist of productive aquifers which are tapped by wells with a depth of 150 metres.

In the Cretaceous formations near Pillaiyarkuppam at a depth of about 140 metres aquifers yielding upto 250 gall. per minute (under a 40 lit. pressure) have been encountered. In the area where shales dominate generally ground water supply is poor due to their impervious nature necessitating broad open wells. Calcareous sandstones which occur inter-bedded with the shales are generally found to be water bearing.

In the area lying between Villiyanur and Pondicherry, brackish water has been met with in the black clays at certain places. They are described as 'connate' water locked up in the marine sediments. The water in the black clays have a sulphurous smell at places due to percolation through peaty soil surcharged with sulphates, and due to the presence of sulphur minerals like pyrite, marcasite in clay stones, argillaceous sandstones and limestones.

Ground water survey conducted in 1965 showed that tube-wells sunk during recent years have been so many and are so irregularly distributed that some of them do not yield water while adjoining ones are pumped. Reports point out that continuous pumping and constant removal of sand leads to hollows being formed, resulting in the collapse of the sides of tube-wells. If this is continued for long, this is said to lead to localised subsidence. The survey suggests that this

could be avoided by putting gravel packed wells that are now in vogue. The reports further warn that the heavy pumping of water, if not regulated properly, may lead to decrease in the quality of water more so as the area lies on the seashore. The imposition of certain restrictions on the sinking of tube-wells, and regulation of the exploitation of ground water has been suggested in order to ensure the conservation of ground water. Ground water studies on the rate of recharge of the aquifers have also been suggested so that the draw of water is restricted. Pondicherry being a coastal town there is always a danger of salt water incursion from the sea at shallow depths. Since water tapped by bore-wells is from deeper aquifers, it can be safely developed.

Following the drought in 1969, the Geological Survey of India took up on a priority basis systematic assessment of the ground water potential in Pondicherry region. The Geological Survey of India drilled recently 15 bore-wells, 10 in Pondicherry town and five at the site of 'Auroville' each averaging 100 metres in depth. 15 Among the wells drilled by the Geological Survey of India under the exploratory programme, the well inside the Botanical garden (Pondicherry) down to a depth of 130 metres proved to be very successful. The iron content in the water is reported to be slightly more than normal. The yield of water in Gandhinagar and Shanmukhapuram on the Pondicherry—Usteri road was found to be fairly good. The well which was taken to a depth of about 120 m. close to Auro Centre gave a poor yield of water.

A study of the Kiliyanur—Pondicherry section is considered important as it runs through the central part of the area covered. The yield of water is likely to be poor in this area with increasing depth since very low resistivity values are registered. The character of the formation overlying the crystallines near Gorimedu changes suddenly as the velocity falls to 2250 m/sec. suggesting the possible continuation of sandstone formation down to the basement. The yield of water is not likely to increase with depth as could be seen from the trend of the resistivity profiles over the Cretaceous formations.

The Muttarambattu-Villiyannur section runs in the north-west to south-east direction over a distance of 12 km. The terrain being almost flat, the crystalline basement is picked upto Valudavur (in South Arcot District) and beyond this it deepens further. It is pointed out that good amount of water can be tapped at these places.

The Kiliyanur-Kanakachettikulam section lies in an east-west direction running close to Kilaveli tank on the north. The terrain is flat with a cover of black cotton soil. The quality of water is known to be fairly good in the entire area.¹⁶ Except for the tube-well in the Botanical gardens where the water was not potable, all others were successful and yielded good quality water.

Geophysical survey (resistivity and refraction seismic studies) in the Villianur area has indicated that the sedimentary cover is about 500 m. thick. This is said to have a favourable bearing on the possibilities of developing ground water in the area.

The Central Ground Water Board had drilled exploratory tube-wells to a depth of 600 metres at many places like Mulakkulam, Madagadippattu, Madukkarai and Manappattu. Even upto that depth sedimentaries continued their existence. Hence it is assumed that bedrocks may be still beyond that depth. But at Katterikuppam bedrock was encountered at a depth of 300 metres, in Kalapet at 500 metres, in Alankuppam at 250 metres depth. The Directorate of Agriculture undertook drilling of a pilot hole at Kunichampattu to a depth of 43 metres and encountered with charnockite (bedrock) at that depth.

Geological data for Auroville township was collected in the year 1969.¹⁷ The study of Cuddalore sandstone formation around Pondicherry town was particularly useful for the proposed Auroville township in an area of about 210 sq. km.

The Oil and Natural Gas Commission had also put down a bore-well to a depth of 100 metres near Ramanathapuram. They are reported to have struck the crystalline basement at a depth of about 100 metres. From the geological point of view, this area assumes some importance for further ground water development. The quality of water is fairly good for both agricultural and domestic consumption.

Karaikal Region : Karaikal region gets most of its water for irrigation from Kaveri and as such ground water resources in the region have not been fully developed. Here the water table lies at depths of 3—4 metres below ground level and during summer declines to 6—7 metres below ground level. In a number of villages filter point wells piercing sandy materials down to about five metres and fitted with hand-pumps supply fairly good quality water. In many cases the quality of shallow ground water is rather poor. In the past, several attempts were made to tap ground water by means of deep tube-wells for drinking and agricultural purposes.

The region is occupied by alluvium consisting of sands and clays. Data of bore-holes put down in the vicinity of Karaikal indicate that the thickness of the alluvium is possibly of the order of 68 metres. The alluvium is underlain by the Karaikal beds of Pliocene age consisting of sands, gravels and clay. Wells in and around Karaikal range in depth from 3.5 to 10.7 metres, with the maximum depth of water level in summer being of the order of six metres.

Ground water in Karaikal is developed chiefly by means of dug wells or filter-point wells piercing blown sands and alluvium. A few bore-holes not exceeding 50 metres in depth drilled in the vicinity of Karaikal were reported to have been abandoned on account of the poor quality of water in the granular zones in the alluvium. However the data of a deep bore-hole put down at Karaikal in 1884 indicated that confined aquifers overlain by a thick bed of clay could be expected to occur below a depth of 90 metres in and around Karaikal which is expected to be a source of potential water supply, if tapped by tube-wells.

To the south and west of Muppattankudi and towards Mathur further west, sands are met with down to depths of 8 to 12 metres below surface. Wells tapping these sand yield water in plenty. About 1.6 km. south-south-east of Nedungadu, in the western portion of the region, confined aquifers have been tapped by a tube-well. In a number of tube-wells attempted down to depths of upto five metres only brackish water is reported to have been met with. A tube-well down to a depth of 61.7 m. near Akalanganni is said to yield brackish water.

Karaikal town gets its water by means of a battery of shallow interconnected open wells and an infiltration gallery in the bed of Arasalar. A few villages between Akalanganni and Karaikal also get their water supply from this source. The town faces difficult water supply position during the months of April-June, when there is no flow in the Arasalar. Owing to the limited extent and thickness of sands in the bed of Arasalar in the vicinity of the well site, attempts to increase the number of wells in Arasalar bed have been unsuccessful.

The Geological Survey of India, in a report (1965) had suggested to probe the bed of Nandalar to find out areas where sands may be sufficiently thick, so that wells or infiltration gallery could be constructed for augmenting water supply to Karaikal and other villages. The report had also suggested the drilling of a few exploratory bore-holes piercing the deeper aquifers in older formations so as to tap, if possible, ground water of good chemical quality by means of tube-wells in the north-western portion of Karaikal region under proper technical supervision.

Mahe Region : Depth of water in the thick alluvium overlying the laterite, along the river bank varies from 1 to 1.5 metres below ground level and in the laterite areas it varies from 4.5 to 8.00 metres below ground level, during the dry months.

A narrow strip of land about 25m. to 30m. wide depending upon the immediate topography and nature of the soil along the river bank experience salt water intrusion in the near surface aquifer or the dug well zone during the summer months.

The area being underlain by crystalline rocks with a limited thickness of laterite as the only saturated zone, the ground water potential of the area seems very limited. According to the Ground Water Division of the Geological Survey of India, the limited source has to be developed only through large diameter open wells.

Yanam Region : Yanam region is occupied by alluvium consisting of sands, clay and gravel. Ground water occurs both under water table and confined conditions in the granular beds in the alluvial deposits, and is developed by means of shallow filter point wells within a depth of nine metres.

IV. Geology

Pondicherry Region:

Geological Survey : The Pondicherry region first received wide geological attention following the recognition by **Kayee** and **Conliffe** in 1842 of an interesting suite of marine rocks with varied and rich fauna. This fauna was studied by palaeontologists like **Egerton** (1844), **Forbes, E** (1846), **D' Orbigny, M.** (1847 & 1850), **D' Archiac** (1853), **Carter** (1854) and **Hunter** (1857-58). The first systematic geological study of the region dates back to 1862 when **H. F. Blanford** by his pioneering work identified the sedimentary formations here. His studies led to the recognition of sedimentary sequences and their correlation with the Cretaceous and Tertiary formations of South India. Based on the lithology and fossil content, he sub-divided the Cretaceous rocks into two sub-divisions. (1) Ariyalur 'group' (equivalent to Ariyalur group of Tiruchchirapalli) (2) Valudavur 'group' (equivalent to Utatur). This was followed mostly by palaeontological studies by **Stoliczka, F** (1873).

Dr. H. Warth who investigated this area in 1895 distinguished six lithological horizons (A to F) in the area, the lower three being equivalent to Valudavur 'group' and the upper three correlatable to Ariyalur 'group' of **Blanford**. **Kossmatt** (1897) classified the Cretaceous succession into three sub-divisions viz., 1. Anisoceras 2. Trigonarca 3. Nerinea beds, all equivalent to Ariyalur 'group' of Tiruchchirapalli. He also recorded the presence of phosphatised shells in the Tuttipattu—Akasampattu (South Arcot District) tract of the Cretaceous belt of the Pondicherry area.

The presence of the Middle Eocene in the Pondicherry area was pointed out by **Furon** and **Lemoine** in 1938. The discovery of Lower Eocene foraminifera (Nummulites and Discocyclina) was announced by **L. Rama Rao** in 1939 in the area which was hitherto known to contain only Cretaceous rocks. After a detailed field study in 1964-65, **Rajagopalan** recognised three formal lithological units.

1. Valudavur
2. Mettuveli
3. Pondicherry formations being roughly equivalent to the three divisions of Kossmatt.

Late Campanian to Maestrichtian age was assigned to Valudavur and Mettuveli formations and Early Tertiary age to Pondicherry formations. Many others have also added to our knowledge of Pondicherry area.

Geological formations : Pondicherry region is occupied by Archeaeans restricted to a small area and other formations ranging in age from Cretaceous to Recent as shown below :

<i>Recent</i>	.. Soils, blown sands.
<i>Sub-recent</i>	.. Alluvium and laterite
<i>Miocene-Pliocene</i>	.. Cuddalore sandstones
<i>Eocene</i>	.. Limestone
<i>Cretaceous</i>	.. Limestone, shale, marl
	—Unconformity—
<i>Archaean</i>	.. Charnockite

Coarse grained, bluish grey coloured acid charnockites are noticed in the small low mounds along the bed of Varahanadi (Gingee) about 3 km. to the north-north-east of Kunichampattu. In this section, the rock contains hypersthene marginally altered to biotite, hornblende, plagioclase feldspars (*Albite-Oligoclase*), quartz and a few opaque grains or magnetite. The plagioclase twin planes are gently bent while the quartz grains show strain shadows. The rock is medium to coarse grained.

The Upper Cretaceous rocks of Pondicherry area mark the northern limit of the sediments laid during the great Cenomanian marine transgression along the east coast of South India. 19

The Cretaceous beds comprise hard and marine limestone, calcareous marls, sandy and calcareous shale, shell limestone, calcareous sandstone and granular yellow limestone. These units may be grouped broadly for purposes of description into three lithological horizons depending on their occurrence and association as follows :

Horizon	Lithological classification	Zone/Areas in which observed
Three	Light yellow granular limestone with bands of calcareous shale and marly material.	Traced from near Pillaiyarkuppam to Turavai through Tondamanattam, Kadapperikuppam, Karasur, Sedarappattu and Akasampattu.
Two	Shales with shells of <i>Trigonoarca</i> , calcareous sandstones and shell limestone.	Well developed in the area lying between Mettuveli and the Vanur—Pondicherry road from Karasur and Sedarappattu to Akasampattu in the east and then to Turavai in a general north-eastern direction.
One	Brownish red arenaceous limestone with white marls.	Around Katterikuppam.

Blanford computed the thickness of the Cretaceous rocks of Pondicherry area at about 275 m. A recent study has shown that these rocks show more or less perfect horizontality at most of the places, but in general 2 to 3° inclination towards south-east is observed. The total thickness of these rocks, considering the uniform dip, comes to about 220–250 metres.

Furon and Lemoine (1939) described Nummulitic series in the Pondicherry area from old geological collections of the Museums of Natural History, Paris. The materials are limestone with *assilina* and sandstone with *Orthophragmina* collected from a depth of about 150 to 180 m. in a bore-hole located in the alluvial plains of Pondicherry. From a comparison of these fossils with those in the

Middle Eocene of Sind and Baluchistan and Oligocene limestone of Baluchistan, the authors concluded that marine Nummulites occur in the Pondicherry area representing Middle Eocene and a part of Bastonian. Since their work, not much additional information has been added to our knowledge of these beds except for the recognition of Paleocene strata part of which is separated by some scholars as representing Eocene beds. 20

The ferruginous sandstones which have been designated as Cuddalore Sandstones by **Blanford** overlie the Cretaceous beds. The Pondicherry area is occupied for the greater part by rocks of this group. They are well developed in the Red Hills to the north-west of Pondicherry town while in the southern and south-eastern portions of the region they lie concealed by alluvium and their presence is recognisable only from well cuttings. The 'Cuddalores' are marked by a thick cover of ferruginous soil and rocks are exposed at the deeper portion of stream or at their head. The best section of these rocks is observed to the west of Chinna Kalapet. At other places, the high grounds at which they are generally met with are covered by sandy soil derived from the decomposition of the softer sandstones.

The beds strike in a general north-east to north-north-eastern direction dipping at angles of 5-10° to the south-east and may be occasionally false bedded. Shales form thin beds generally and may be carbonaceous. Lignite seams varying in width from 4.5 to 6 m. have been encountered in these rocks around Bahur.

The Cuddalore beds which constitute the Tiruvakkarai ridge extend in a general easterly direction into the Pondicherry area and are observed on the high ground about 3 km. north-east of Suttukanni and in well sections about 2.4 km. to the east of it. Its contact with the Cretaceous beds to the west of Katterikuppam is lost under soil cover. The rocks are again met with to the east of Usteri from where they extend in a general east-north-east to north-easterly direction through Muttirapalaiyam, Karuvadikkuppam to Kalapet. To the west of Kalapet the lateritised Cuddalore sandstones form a small steep cliff running in a general north-north-easterly direction. The rocks have been encountered at shallow depths in wells around Mel Avinjipattu, Karkilambakkam and also at Tirubhuvanai while in the rest of the region they are observed only in wells.

The rocks may be divided into three petrological units for purposes of description as (i) sandstone, (ii) pebble and (iii) shale. Sandstone is the most common member of the 'Cuddalores' and shows little variation in composition being composed for the great part of quartz with small amounts of Kaolonised

felspars. The rocks are generally soft and friable with a light yellow colour. Pink to purple varieties are also observed south-east of Suttukanni, north-west of Kaltaraimandapam, near Bahur and Nattamedu. A dark compact ferruginous rock is locally developed with them near Kalapet and Muttirapalaiyam.

The sandstones grade into pebble beds with increase of quartz pebbles. The pebble beds consist mostly of quartz, varying in size from that of a coffee seed to a maximum of about five cm. set in a *finer matrix of quartz* grains. Where the pebbles are very coarse, a conglomeratic aspect is imparted to the rock. In addition to quartz pebbles, occasionally granite pebbles are also observed. The pebble beds form thin zones varying in width from about 2.5 cm. to 0.9 m. and may represent a local facies variation in the depositing sediments. The rock is observed along *nullahs* about 1.5 km. to the north-north-west of Kadirkamam and around Kalapet. They are worked at places for quartz gravels.

Shales occur as thin beds, generally lenticular and impersistent in the sandstones, along *nullahs* in the Red Hills and near Kalapet. It is of common occurrence in the plain country. The shales are generally white to light grey in colour but may be also locally greenish, light yellow or buff. The rocks have been observed in wells near Nettappakkam, Panaiyadikuppam, Kuruvinnattam, Kilur, Sadayandikuppam, Andipalaiyam, Pidarikuppam and Chinna Kottaikuppam. The shales near Pudukkadai are stated to be carbonaceous, while around Nonanguppam they have a buff to light brown colour. They are generally plastic and carry fair amounts of clay portion.

No fossils have been met with in the Cuddalores excepting fossilwood, occurring as trees of a maximum length of 2.8 m. and a diameter of 0.75 m. as near as Kalapet. An Upper Miocene age has been assigned to the Cuddalores from plant remains. **Furon** (1943) believed them to be equivalent to the Pontian-Pliocene of the Irrawady system of Burma while **Eames** (1950) placed them younger than Pontian and perhaps even younger than the Karaikal beds of Pliocene age.

Recent and Sub-Recent formations : Soil, coastal sands, alluvium and laterite cover up a great part of the area.

The laterites cap the Cuddalore sandstones. The grits and sandstones have been lateritised to a depth of about six metres. The Red Hills of Pondicherry are covered by this earthy material. The laterite met with is not the usual porous, pitted clay rock but a red earthy mass derived from the sandstones. Locally a compact variety of laterite looking more like a ferruginous conglomerate could be observed to the west of Kalapet.

A good part of the terrain is covered by alluvium of varying thickness. The alluvium consists of a black compact clayey material generally soft and at places emitting sulphurous smell. It simulates marine clay deposited to coastal swamps. The clayey material forms layers alternating with sand and has been met with in borings. It has a variable thickness and seems to form pockets and lenses perhaps depending on the basement over which it has been deposited. Peaty material associated with them could also be observed at places. Marine shells and oysters are also found in the clays. It (alluvium) is stated to have a thickness varying from 15 m. to as much as 68 m. In the vicinity of Madukkarai it is reported to extend upto a depth of 25 m., in the Bahur-Kattukkuppam area to 20-35 m., Tavalakuppam 18 m., Ariyankuppam-Thengathittu area-40m., Sivara ntagam-15 m., Ariyur-Ariyasai-pettai (Ariyapalayam) area 30 m., Kottapurinattam-Sorappattu-Ammanankuppam area-30 m., Villianur-Ellupillaichavadi-40 m. and Pondicherry-22-38 m. Near about Uruvaiyur upto a depth of 68 m. black clays are stated to persist.

Light brownish medium grained sand is observed along the coast between Pudukkuppam and Pondicherry and east of Kalapet varying in width from 0.2 km. to a maximum of 0.8 km. The sands consist for the great part of quartz with small amounts of heavies mostly magnetite and a little of epidote. Two small patches with magnetite concentrated in fair amount are observed east-north-east of Nallavadu upto Virampattinam.

In the alluvial country the most commonly observed soil is a light brownish sandy loam. It shows little variation in composition laterally. Locally alkaline soils may be noticed as near as Sivarantagam (South Arcot District) and to the north-west of Sedarappattu.

In the area to the east of the Cuddalore-Pondicherry road, sandy soils are observed. Around Tirubhuvanai and Pallittennal also sands and sandy soils are developed. In the northern portion of the area near Pudukkuppam, Kalapet and the high-ground between Ayyankuttipalaiyam and Karuvadikkuppam lateritic and sandy soils are met with.

Mineral wealth : Mineral surveys were commenced by the Geological Survey of India in 1956 and the entire area was geologically mapped on the scale of 1=63,360. More recently the Survey investigated the limestone deposits of Pondicherry.

Ceramic clays : In the Red Hills and the high-ground to the west of Kalapet impersistent bands of shale are noticed. They are seen to contain clay varying from 75 to 90%. The clays are medium grained, soft and plastic. White to grey ceramic clays are observed associated with the Cuddalore sandstones at the following places :

	Direction	Distance from	Depth	Type of clay
1. Nettappakkam ..	SSE	0.6 km.	33.36 m.	White clays
2. Panaiyadikuppam ..	SE	0.8 „	83 „	
3. Kaduvanur (Bahur Commune) ..	SE	0.8 „	45 „	White plastic clays.
4. Nonanguppam (Ariyankuppam Commune)	NNE	0.5 „		Semi plastic and plastic clays of buff colour.
5. Abhishekapakkam (Ariyankuppam) ..	S			Grits carrying clays.
6. Pillaitottam (Mudaliyarpettai) ..	NNE	1.0 „		
7. Kil Avinjipattu (near Reddichavadi in South Arcot District) ..	NSW	0.6 „	71 „	Plastic and sticky dark grey clays inter bedded with lignite.

In addition to the above localities, plastic clays have been observed during the course of drilling for water near Bahur, south of Seliyamedu and Kanniyakovil.

As similar clays associated with the Cuddalore sandstones in the Neyveli lignite field have been found useful for ceramic purposes, the clays in the Pondicherry area could perhaps be used similarly. Some of the clays particularly near Nonanguppam and Kil Avinjipattu will require some testing to find out whether they could be classified as fire clays. The high overburden of these clays would however make the cost of their exploitation expensive.

Brick clays : In the alluvial tract of Pondicherry, clays suitable for manufacture of bricks have been located between Muttupillaipalaiyam-Arasur, Tondamanattam-Poraiyur, Villiyanur-Uruvaiyar and Odiyanbattu-Papanchavadi. Situated within 10 to 15 km. west-south-west of Pondicherry town in the vicinity of existing brick kilns, these clays, estimated at 1.64 million tonnes, can meet the growing demand for bricks.

Brick earth is exploited, generally to a depth of about 0.9 m. for brick making at the following places :

	Area.
1. Around Tavalakuppam	3.5 hectares
2. Near Purnankuppam	0.5 „
3. Between Ottampalayam and Kommapakkam ..	16.0 „
4. West of Villiyanur along the bank of Gingee ..	2.00 „
5. South of Muttupillaipalaiyam	0.3 „
6. East of Sultanpettai	0.5 „
7. Near Ozhukarai	0.3 „
8. South of Muttirapalaiyam	0.6 „
9. Near Shanmukhapuram (Mettuppalaiyam) ..	2.0 „
10. From the tank north of Reddiarpalaiyam ..	2.4 „
11. North of Tondamanattam	8.0 „

Tile clays : The fine red clayey silt from the Kanakaneri, about 0.4 km north of Reddiarpalaiyam, is being used in the manufacture of “Mangalore” tiles. The lake silt, about 15 cm. thick, is annually replenished by the streams that drain the Red Hills to the north. Possibilities of locating similar red silt exist in the bed of the much larger Usteri which is also fed by the streams draining the Red Hills.

Lignite : Lignite seams varying in thickness from 6 to 9 metres have been met with in the Cuddalore sandstones associated with clays and artesian aquifers in Bahur Commune. The material is of light brown colour and carries marcasite at places. In the artesian wells put down around Bahur as early as in 1881 lignite was encountered near about Bahur (seam 10.6 m; depth. 78.00 m.) Aranganur (seam 8.2 m; depth 63.00 m.) and Kanniyakovil (seam 15m; depth 100 m.).

Seven samples of the lignite analysed in Paris showed an average ash content of 8.35%.

One of the several available analysis showed the following results :

Moisture	..	..	..	16.28 %
Volatile matter	..	..	..	38.55 %
Fixed carbon	..	..	..	37.72 %
Ash	..	..	..	7.45 %
Calorific value	..	..	..	5,318 calories.

Lignite met with near Bahur is stated to compare favourably well with that of Neyveli based on proximate analysis, viz.,

Moisture	..	..	35.5 to 41.7 %
Volatile matter	..	..	27.83 to 33.06 %
Fixed carbon	..	..	21.40 to 27.54 %
Ash	..	..	5.9 to 9.7 %
Volatile matter on ash and moisture free basis	..	..	54.5 to 57.3 %
Fixed carbon on ash and moisture free basis	..	..	42.7 to 45.5 %

During the last few years lignite has been recorded while drilling for tube-wells near Seliyamedu (seam 9 m; depth 68 m.), Kaduvanur (seam thin; depth 46 m.), Kirumambakkam (depth 114 m.), Thimmanaickenpalaiyam (seam thin; depth 100 m.), Abhishekapakkam (seam thin; depth 100m.), besides Nonanguppam and Kuruvinnattam.

Thin stringers of lignite have also been encountered at various depths in Kil Avinjipattu, Reddichavadi, Pudukkadai, Kattupalayam, Singarakkudi and Vadapuram in the enclave of South Arcot District.

The occurrences of lignite detailed above are found over an area of about 2,000-2,400 hectares in Pondicherry region and about 240 hectares in the South Arcot enclaves. Another estimate placed the area at about 4,000 hectares, estimated to contain about 2,50,000 tonnes. The lignite seams are no doubt thin compared to the Neyveli field but the quality appears more or less the same. The lignite to overburden ratio in the Pondicherry area works out roughly to 1:8, as against 1:3 for Neyveli (Dey & Brown).

Marine shells : In the backwaters about 0.8 km. to the south of Pondicherry and in the Ariyankuppam river (north-east of Ariyankuppam) bivalve shells and occasionally gastropods are collected for use in making lime. Shells are said to be found to an average depth of 7.5 cm. in the lagoon and to 15 cm. at its mouth with the sea. The shells (with the animals) are carried into the lagoons during the high-tide and grow there. They are generally of small size (2½ cm. long on the average). From the rate of average yield furnished by the contractors, it was computed that in the lake south of Pondicherry about 1,000 tonnes (27,000 cft.) of shells are collected annually and much less than that in the Ariyankuppam river. The amount of shell yielded is considered too small for any industrial use.

Marine limestone : In the north-west portion of the Pondicherry region Cretaceous limestones are quarried around Mettuveli, Tuttippattu, Karasur and Sedarappattu. The limestone quarried is generally of light yellow colour and arenaceous, and lies in the Nerinea stage (Danian age) of the Pondicherry Cretaceous beds. Though limestone is met with in the older beds of the system, the material is not generally used for lime making, as it is highly impure.

The following are the places where limestone is quarried :

Mettuveli-Tuttippattu area : Roughly 0.6 km. south-east of Mettuveli limestone is quarried over an area of about 0.4 km. x 0.05 km. Light brown to yellow limestone is exposed under a 0.75 m. cover of black soil. It has a thickness of about 0.6 m. About 0.8 km. south-south-west of Tuttippattu over an area of about 0.4 km. x 0.2 km. limestone is quarried in shallow pits where it is found under a 0.7 m. soil capping. It is nodular at places and is interbedded with calcareous shale. Limestone has been observed in well sections in between the above areas and also around Pillaiyarkuppam. Assuming that the bed is continuous in the above area and on the basis of an average thickness of about 0.6 m. the total reserve is estimated to be of the order of 2,160,000 tonnes.

Karasur area : Limestone is quarried in the western portion of Karasur village. To the south of the village and upto the outskirts, a number of shallow filled up workings wherefrom limestone has been quarried are observed. Assuming that the limestone form a continuous bed here the total quantity of material expected over an area of 1.1 km. x 0.6 km. and a thickness of 0.6 m. for the limestone bed the total quantity expected here is of the order of 871,200 tonnes. Assuming that about half has been worked the reserves left would be 435,600 tonnes.

Sedarappattu area : East of Sedarappattu, Nerinea limestones form a fairly continuous bed with an average thickness of about 0.6 m. It is traced over a length of 2.4 km. with a width of about 0.5 km. Available reserves are estimated at 2.66 million tonnes of which 0.9 million tonnes are of nearly cement grade.

Turavai : Limestone is also quarried about 0.4 km. in a general north-north-east direction from Turavai in shallow pits. The limestone expected here, over an area of 0.6 km. x 0.4 km. on the basis that the bed has a thickness of about 0.6 cm. is of the order of 320,000 tonnes.

Recent investigations in Tuttippattu-Mettuveli block and Kadapperikuppam-Karasur block including the intervening areas in South Arcot District, indicate 2.17 million tonnes of limestone suitable for manufacture of cement in the adjoining Sedarappattu block, earlier estimated at 0.9 million tonnes, has proved to be more promising following the drilling at Sedarappattu which indicated a 16 m. thick limestone bed with the top 2 m. suitable for manufacture of cement. This bed which has a strike extension of nearly 6.5 km. between south of Mettuveli and east and north-east of Sedarappattu appears to be promising and calls for further exploration.*

Results of the sample analysis conducted in the chemical laboratory of the Geological Survey of India, Madras Circle are shown below :

Sample	Locality	Ca O	S ₁ O ₃	R ₂ O ₃
1	From the <i>nullah</i> south of Harijan Colony (Sedarappattu)	45.61	10.14	4.45
2	60 m. east of Harijan Colony	46.27	9.35	3.40
3	About 6 m. in a S 30° E direction from a sample No. 2	44.51	11.58	0.80
4	From a quarry about 60 m. in a S 40° E direction of the Sedarappattu road junction with the Vanur-Pondicherry road.	41.43	17.15	0.60
5	About 40 m. in S 20° E direction from 9/200 km. stone along the Sedarappattu road	42.75	13.03	1.50

* Souvenir Brochure—Inauguration of the Geological Museum in Pondicherry (28 February 1972).

Sample	Locality	CaO	S ₁ O ₂	R ₂ O ₃
6	Quarry in the casuarina grove about 3/4 furlong east of sample 5	45.51	10.99	4.50
7	About 1½ furlongs south-west of the Sedarappattu tank along its off-flow channel	45.51	8.44	6.10
8	From the off-flow channel along the Karasur tank	38.23	25.23	N.D.
9	South-western portion of Karasur village	37.90	22.63	N.D.
10	About a furlong west of the mullah 800 metre west, south-west of Sedarappattu	28.90	46.51	N.D.
11	About 5 metres in S 10° W direction from sample No. 10	20.79	41.13	N.D.
12	Shell limestone outcrop on the road about 3 m. north-north-east of Karasur village	36.56	27.99	N.D.

Analysis of samples 1 to 7 collected from the Sedarappattu area showed 41.43 to 46.27% CaO, 8.44 to 17.15% S₁O₂ and 0.6 to 6.10% R₂O₃. Some of the limestones from this area, as revealed by the above analyses approach cement grade while those from the Karasur area and in the Trigonarca beds are impure for industrial use.

Peat : Peat associated with clays has been recovered from a well to the south-south-east of Ariyankuppam at the depth of 8 to 9 metres. Similar material is also stated to have been met with in wells south of Karuvadikkuppam, west of Muttiyalupettai, north-east of Pillaitottam and near Tattatukalavapet associated with clays from a depth of about 8 m. A sample from the Ariyankuppam occurrence on analysis yielded 10% moisture, 18.7% volatile matter, 8.84% fixed carbon and 62.46% ash. It has a sp. gravity of 1.84.

Peat occurrences of this kind in alluvial deposits have been recorded elsewhere along the coast. These are too impure for use as fuel. They are only indicators of the general subsidence of the coast.

Phosphatic rocks : Black phosphatised shells occur in association with limestone near Karasur and Turavai. Such shells analysed showed 12.85% P, O_5 content while an average sample of limestone itself gave the result of 6.56% $P_2 O_5$. The limestone beds are thin and impersistent.

Phosphatic nodules and nearly phosphorite occur in association with Nerinea limestone beds near Tuttippattu. A sample of nodule from near Kadapperikuppam has analysed 13.71% $P_2 O_5$ but such nodules are not considered to be of any economic significance.*

Building stones : The shell limestone, constituting the Trigonarca beds of Cretaceous age and occurring between Tuttippattu and north-west of Sedarappattu and farther to the north-east, which has been quarried for building stones may also be used as ornamental building stones after sizing and polishing.

Pebble bearing grits form the lower beds of the Cuddalores in the 'Red Hills' and Kalapet areas. The pebbles, mostly of quartz and quartzite, measure upto 4 cm. across, and can be used after sorting for architectural facades and gravel packing in tube-wells.

Karaikal Region:

Karaikal is indebted to **Cossman**, for it was he who for the first time recorded from a bore hole in Karaikal in the year 1900, richly fossiliferous marine beds of Pliocene age (7 million years) and called them 'Karaikal beds' which mark an important horizon in the coastal Tertiary sedimentaries. Based on the faunal assemblages, **Cossman** considered the Karaikal beds to be of Pliocene age (Post-Pontian). It was this important stratigraphic horizon which indicated the prospects of 'oil shows'. This in turn attracted the attention of the Geological Survey of India between 1959-61 and later on the O.N.G.C., who carried out detailed studies for determining the possibility of the occurrence of oil.

*B. LASKAR AND A. S. NARASIMHAN : Rock Phosphate Deposits in the Cretaceous Rocks of South India, p. 105-112 in Cretaceous-Tertiary Formations of South India, Memoir No. 2 (1968). Geological Society of India.

In 1901, **Vredenburg** in his description of Molluscan fauna from Post Eocene Tertiary formations of north-western India referred to the Molluscan fossils recovered from Karaikal. He compared the fossils with other horizons and stated that the Karaikal beds were equivalent of the Gwadar Stage of the Makran Series of Baluchistan and were also closely related to the Odeny Stage of Java.

The Geophysical studies conducted by the Geological Survey of India and O.N.G.C. during 1954-65 revealed promising structures following which the O.N.G.C. took up detailed investigations including deep drilling.

Geological formations :

The Karaikal area is completely covered by a thick mantle of alluvium and no exposures are met with anywhere.

The following is the geological succession of the formations :

Recent and Sub-recent	Blown sands, alluvium
Pliocene	Karaikal beds
Mio-Pliocene	Cuddalore formations

Cuddalore formations : This group of rocks is met with in the area contiguous to Karaikal region, in Thanjavur District. In the north-western portion of this area, in a bore hole put down to a depth 61 metres at a point about 1 km. to the north-west of Serumavilangai (marked by huts to 1.6 km. south, south-east of Nedungadu) coarse pebble sandstones associated with red clayey materials were stated to have been encountered between 30 and 45 metres below surface. These may perhaps be equated to the Cuddalore beds in view of their lithological similarity with the known Cuddalores.

Upper Tertiary rocks of Pliocene age were recognised by **Cossman** for the first time from materials recovered from a tube-well put down between 1880 and 1884, opposite to the Administrator's Office in Karaikal town. The well penetrated artesian aquifers at 105.46 m. with water rising 10 cm. above the surface and another at 105.76 m. which overflowed 2 m. above ground level with a free discharge of 100 litres per minute. It formed the fore-runner of the present day oil exploration in the region. The well went down to a depth of 162 m. and encountered alternating horizons of sand and clay and their admixtures as also a few pebble beds, conglomerates and fossil beds. The fossiliferous horizons were met between 56.5 and 162 m. The bore hole yielded a variety of rich molluscan fauna with gastropoda dominating. Based on the faunal assemblages, **Cossman** considered the Karaikal beds to be of Pliocene age (Post-Pontian) and younger than the Quilon and Jaffna beds. **Vredenburg** who compared the fossils with

other horizons was of the opinion that the Karaikal beds were equivalents of the Gwadar Stage of the Makran series of Baluchistan and were also closely related to the Odeny Stage of Java. It is also stated to bear a relationship to the Pegu Series of Burma. Eames (1950) made a reference to the Karaikal Pliocene beds while discussing the age of certain Upper Tertiary beds of Peninsular India and Sri Lanka. He was of the opinion that the varied fauna met with in the Karaikal beds was comparable to those in the Tipam sandstones of Burma. According to him there was no satisfactory palaeontological evidence for regarding the Cuddalore sandstones as being of Pontian age, i.e., older than the Karaikal beds.

Alluvium : The entire region is completely under cover of alluvium of variable thickness. Towards the western portion the alluvium is more clayey while in the area around the Nagore—Tarangambadi road, it is more sandy. Sandy soils may be observed to the south-west of Tirumalārajanpattinam, north, north-west of Mel Vanjiyur and along the Tirunallar—Nedungadu road. On the north-western corner of Karaikal region in a tube-well alluvial formations were encountered upto a depth of 26 m. and about 116 m. east, south-east of Mel Kasakkudi upto a depth of 15 m. soils of clay and sandy variety are stated to have been met with. Near Akalanganni alluvium was met with intercalations of unconsolidated sand layers to a depth of about 32 m. The soils around Agara-settur are somewhat clayey while around Pudutturai and Puttakudi they are alkaline.

Clays, at places almost as black as coal, were stated to have been encountered in some of the tube-wells in the area. It is also reported to catch fire to a slight degree. It is presumably a marine clay with peat which is of common occurrence along the coast. The clays are reported to have been met with near Karkkangudi (thickness 6 m.), Valattamangalam (depth about 21 m.), Muppattankudi and Ambagarattur (thickness 8 m.).

Along the coast-line stretching from Nagore on the south of Karaikal upto Sendanayapuram (Thanjavur District) on the north, light brownish, black and locally pink coloured sands are met with for an average width of about 0.5 km. The sands comprise quartz which is predominant, ilmenite, magnetite, garnet and occasionally epidote.

Mineral wealth :

The following are the minerals met with in the region :

(i) *Brick clays* : The alluvial soils are locally worked for making bricks. The soils preferred for this purpose are the loamy varieties. It is common to find it blended with sand or clay depending on its composition, such that it would respond to moulding. Generally soils to a depth of about one metre are worked.

Brick clays are won from banks of Arasalar about 1.6 km. almost south-west of Pudutturai over an area of 0.6 sq. km. Clayey soils are also employed for making bricks near Mel Kasakkudi, Nedungadu, Ambagarattur and Vadamattam. Indicated reserves of 1.3 million tonnes have been computed, of which the *padugai* lands along the Arasalar will account for 0.83 million tonnes.

(ii) *Kankar*: About 0.4 km. in a northerly direction from Mel Subbarayapuram village, small amounts of pisolitic kankar are found. It is obtained from a depth of about 1.2 km.

(iii) *Sea shells*: Sea-shells collected from the coast are made use of in making lime for local use. Lime kilns were observed to the west of Karaikal town, near T.R. Pattinam and Akkaravattam.

(iv) *Ilmenite and garnet sands*: Ilmenite and garnet occur in varying concentrations in the beach sands along the Karaikal coast over a stretch of about 10 km. and varying in width from 20 to 100 m. Where the sands are rich in ilmenite, the coast looks as though a black carpet is spread with the ripple marks adding beauty to it. Heavy minerals in general are concentrated along the windward side of the ripples while the sand on the lee-ward side is more or less free from heavy minerals-ilmenite and magnetite. Heavy minerals are in general best concentrated in and around the low-tide zone while in the dunes which lie beyond the high-tide zone they are of poor concentration. It appears that the concentration of the heavy constituent towards the low-tide zone is affected by a winnowing action of the winds, the lighter fraction being carried further to form dunes. East of Mel Vanjiyur, the sands carry varying amounts of the black concentrations and the sand zone may have a maximum width of about 30 metres. Along the coast between Mel Vanjiyur and Kil Vanjiyur the concentration of black sands is rather poor. Richer black sands may be seen east of Kil Vanjiyur in a zone with a maximum width of about 60 metres. The heavy minerals have a thickness varying from 1 to 5 cm. For a length of about 0.8 km. further along the coast ilmenite and magnetite are met with in fair amounts but in the strip beyond and upto Pattanachcheri they are rather irregular and generally moderate to poor.

To the east of Akkaravattam red sands with garnet dominating are observed in a zone about 15 metres wide. They have a thickness varying from 1 cm. to 3 cm. and are traced for about 1.4 km. along the coast and a width varying from 5 to 10 metres. Along the southern banks of Arasalar, red and black sands cover a width of about 8 to 12 metres for about 1.6 km. beyond which they are rather poor in garnet. The sands are met with further on along the coast with a width varying from about 3 to 6 metres. But they are irregular and concentrated in ilmenite and magnetite only in patches.

Near the Karaikal lighthouse, the total concentration of heavies is over 90%; ilmenite and magnetite account for 60% and ilmenite alone 25 to 35%. Beneficiation studies on samples of beach sands, collected east of Akkaravattam, show that the magnetite content is low, being only 3.6% and that the magnetic fraction comprising mostly ilmenite and magnetite with minor amounts of garnet varies from 1.68 to 36.72%. The TiO_2 and Fe percentages in the magnetic fraction vary from 12.65 to 24.85 and 18.99 to 49.15 respectively. Floatation of the non-magnetic fraction shows recoveries of 52.37 to 94.68% of ilmenite in the sinks with TiO_2 percentage of 1.40 to 32.0. The grade of ilmenite is not marketable as a minimum of 50% TiO_2 is required in the concentrates. An assessment of the available reserves of ilmenite and garnet sands in the entire coastal area is yet to be made.

(v) *Oil*: It may not be out of place to mention about the prospecting for oil going on in the area, as a result of the favourable structures and thick sediments deciphered first by the geophysical division of the Geological Survey of India, and later on by the Oil and Natural Gas Commission.

Mahe Region :

The first systematic mapping and mineral investigation of Mahe was carried out in the year 1960.

Geologically the area consists of the following formations :

Recent and Sub-Recent—Laterite and beach sand.

Archaean

Dolerite dykes

Pegmatite veins

Biotite gneiss

Garnetiferous pyroxene-granulite

Amphibolite

Amphibolite is the oldest rock type encountered in the area. It is met with as a small band, about 24.36 metres long and about 12.18 metres wide and appears to be relics of the older rocks caught up in the gneiss, just north of the high ground about 1.5 km. west of Pallur. The rock is well foliated and dark in colour. In this section, it is seen to be composed of coarse prisms of hornblende with a small amount of plagioclase and quartz.

Garnetiferous pyroxene granulite is met as a thin, impersistent band about 0.6 km. south, south-west of the mosque in Pandakkal. The rock is dark and fine to medium grained.

Mahe town area is chiefly occupied by laterite capping the crystalline rocks known as biotite gneiss. This is the predominant rock type in the area. The gneiss is medium to coarse grained and grey in colour.

A dyke of fine grained dolerite about 12 metres wide at the surface is noticed with a north-east-south-west trend, about 0.8 km. east of the mosque in Mahe. This dyke is traced south-west wards for a length of about 1.2 km. Another dyke with a width of about 38 metres is met with in the high ground just south-east of the confluence of the Mahe river and the Arabian sea. This dyke is about 2 km. in length. A third dyke, about 9.14 metres wide is noticed about a furlong west of Mahe railway station. The rock is hard and compact.

Thin veins and stringers of pegmatite cut across the biotite gneiss in all directions. They are usually 2.5 to 8 cm. wide at the surface and about 1.5 to 1.8 metres long. Reddish brown laterite is found in almost all places in the area. The laterite gives rise to red soil which extends to a depth of about 12 metres in some places. The rock is quarried and utilised as a building material to meet the local demands. The road section from the southern limit of the town to Mahe railway station is characterised by the presence of red sand, resembling the wind blown *Red Teri* sands found in the southern extremities of peninsular India.

There is no real alluvium even along the river bank, but an alluvial terrain, mainly of unconsolidated coastal sands is to be seen to the south of the region, but even there it is a shallow basin and rocks lie exposed further west offshore.

In the area between the Mahe—Kozhikode road and the sea, a narrow belt of beach sand (about 66 metres long and 50 metres wide) yellowish white in colour, containing recent shells is seen.

There are no minerals worth mentioning in the region.

Yanam Region :

The region lies in the Godavari deltaic region and is completely covered by recent deposits, viz. soil and alluvium. The area is a flat, featureless country. The soil is greyish black and is essentially clayey in composition. A few thin layers

of sandy clay or sand, not exceeding 0.3 metre in thickness are intercalated with the clayed soil. The river sands on the bank of the Gautami Godavari consists predominantly of quartz, felspar and muscovite mica. A few grains of monazite are also found in the black streaks.

A bore hole dug by the villagers near Mettakurru for water supply is reported to have passed through the following strata down to a total depth of 55 metres (170 feet approx.) :

Sandy soil .. 3 m. thick

Clayey soil .. 6m.-8 m. thick

Sandy soil .. Remainder down to 55 m.

There are no minerals of economic value in the region.

V. Flora

Historical resume.

The earliest writing on the Indian flora commenced actually with **Garcia da Orta**. Between 1560 and 1610, he published his works on the Indian plants, in Portuguese and Latin languages.²¹

The first systematic work on the floral wealth of the western regions appeared by the end of the XVII century (**Rheede** 1673-1703). The plants of Mahe region are treated in that work.²² At the same time, Englishmen, particularly **Petiver** (1703 and 1704), were interested in the flora of Madras and the Coromandel coast,²³ Pondicherry and Mahe attracted the attention of many French naturalists and soon became important centres for the study of Indian Botany.

“French collectors went to Pondicherry and enriched the National Museum in Paris. The first of them was **Pierre Sonnerat** (c. 1745-1814); but he was actually a zoologist; he was at Mahe, Pondicherry, Surat and in Ceylon at various dates after 1781. Next came **Louis Theodore Leschenault de la Tour** (1773-1826) who reached Pondicherry in 1816 as a Research Officer in Natural Objects. He travelled widely and did excellent work. The third was **François Louis Busseuil** who as a surgeon on the ship “**La Thetis**” reached Pondicherry in 1824. Like **Sonnerat** he was at heart a zoologist. The fourth was **Charles Belanger** who arrived in India at the end of 1825 where he collected at Mahe for a few months and whence he crossed leisurely to Pondicherry. After that he went north to Chandernagore, then to Pegu and forward to Malaysia in the ship “**La Chevette**”

which about this time was a coasting vessel in the Bay of Bengal and was based on Pondicherry. In 1828 he returned to Paris with most extensive collections and published his "**Voyage aux Indes Orientales**" (1834). The fifth was A.A.M. **Reynaud**, surgeon on "**La Chevette**" at the time when **Belanger** voyaged about the Bay and he obtained plants at similar places. The sixth was Georges [Samuel] **Perrottet** (1793-1870). His occupation was acclimatisation; and collecting was secondary; but over his extended time in India he made large collections. In 1834 Alphonse **Delessert**, having travelled with **Perrottet**, went to Malaysia, to Calcutta and to Serampore, etc., but was mainly occupied in collecting animals. However he collected plants in Pondicherry, Gingee and the Nilgiri Hills."

"**Leschenault** wrote a couple of very interesting papers on the Madras Flora and **Perrottet** various valuable economic papers. Both had worked back from the coast to the Nilgiri Hills; and **Perrottet's** collections are said to have reached 1500 species, Alphonse **De Candolle** profited greatly by French collections which, it may be said, covered rather effectively a longitudinal slice of India from Mahe on the one side to Pondicherry on the other."²⁴

In 1826 an important botanical garden was created at Pondicherry. Three years later, i.e. in 1829, more than 800 species were being cultivated here, thanks to the initiative of **Jacquemont**. In due course the garden at Pondicherry continued to be enriched considerably with all sorts of plants : ornamental or economic importance, forest types etc., particularly when the garden came under the able control of **Perrottet**, the eminent botanist who made efforts to procure "all the rare and interesting plants."²⁵

Thus, towards the end of the nineteenth century Pondicherry was rich and replete with a collection of numerous plants enabling **Achart** to publish in 1905, a non-illustrated publication entitled '**Quinze cents plantes dans l'Inde**' (Fifteen hundred plants in India).

Given below are the names of some authors whose works deal mainly with the plants of Pondicherry. **Père Dessaint**. C. 1895. **Huillet**, D. 1867, **Paramananda Mariadassou** 1913 and 1937, **Giboin L. M.** 1949, **Gupta** and **Marlange** 1961. **Sri Aurobindo Ashram** released a small fascicule entitled "**Le rôle des fleurs**". (The role of flowers) wherein "**The Mother**" had explained the divine significance of several plants growing naturally or cultivated in and around Pondicherry.

In 1973 an illustrated book was published by Auropress "**Flowers and their messages**". For common plants including weeds the reader will find information in three articles by **R. K. Gupta et al** 26; **M. V. Dabolkar** and **K. A. Shankarnarayan** 27; **Marlange M.** and **Meher-Homji V.M.** 28.

No work relating to the flora of Mahe and Karaikal have appeared so far. As for Yanam, **Bigot** (1950) has left a small but useful study on the botanical garden, founded in 1922 by Father **Gangloff**, listing about 160 species.

An explanation : The flora of a region can be presented in different ways to suit the professional botanists, the agronomists, the phytogeographers or the uninitiated laymen. Among the several possibilities the one which is found suitable for our purpose here is to group them according to their natural habitat. For example, the *banyans* are chiefly road side trees ; the *agaves* are plants of the hedges; the duckweeds thrive in pools with still or stagnant waters; the true *mangrove* trees with their typical aerial roots are seen only in the tidal forests which are always in contact with saline or brackish water. Hence the classification adopted here is based on the ecology of the plants in each region of the Territory.

Pondicherry Region :

The flora of Pondicherry has a remarkable diversity which may be attributed to the diverse soil types comprising the hydromorph soils (rich in clay), the halomorphic soils (terrains more or less saltish), the sand-dunes and the very dry soils developed on the red sandstones of Kalapet, Dhanwantarinagar (Gorimedu) and Usteri. The red sandstones are unknown in Karaikal and Yanam. Added to this a large number of exotic varieties was introduced by the Europeans in the course of the last three centuries.

This ecological diversity is reflected in the land use.

The main dry crops :

Bajra	— <i>Pennisetum typhoides</i> Stapf. et Hubbard (Tam. Kambu);
Groundnut	— <i>Arachis hypogaea</i> L. (Tam. Verkkadalai);
Gingelly	— <i>Sesamum indicum</i> L. (Tam. Ellu);
Cashewnut	— <i>Anacardium occidentale</i> L. (Tam. Mundiri);

The main wet crops :

Rice	— <i>Oryza sativa</i> L. (Tam. Nellu);
Ragi	— <i>Eleusine coracana</i> Gaertn (Tam. Kelvaragu);
Sugar-cane	— <i>Saccharum officinarum</i> L. (Tam. Karumbu);
Bananas	— <i>Musa</i> sp.; (Tam. Valai);
Betel vine	— <i>Piper betel</i> L. (Tam. Vettilai) and — <i>Sesbania sesban</i> (L) Merr.

The flora of the region is listed under six categories viz. hygrophytes, plants of halomorphic soils and sand-dunes, plants of sandstones, avenue trees, hedge plants and ornamental plants.

The hygrophytes (aquatic plants):

The hygrophytes are the species in which certain organs or organisms develop entirely under the water. Most often the dispersal of the seeds is effected by the agency of water (hydrochorous). Interestingly the hydrophytes which are found in Pondicherry are also met with in Karaikal, Mahe and Yanam. Two species of the family of Nymphaeaceae with large floating leaves viz., *Nymphaea stellata* Willd (Tam. Nilotpalam) and *Nymphaea nouchali* Burm. f. are very common in ponds or pools with still water surface. *Nelumbium speciosum* Willd is the biggest Nymphaeaceae with floating leaves. Though not common it is cultivated in some gardens (Eng. Sacred Lotus). One could also find two other aquatic species with small oval shaped floating leaves and small, white flowers in spikes: *Aponogeton natans* Engl. et Kr. (Tam. Kottikilangu) and *A. echinatum* Roxb. When the water depth does not exceed 50 cm. one may find an erect sedge, *Pycnus puncticulatus* Nees (Cyperaceae), and often *Blyxa octandra* Pl. and *B. aubertii* Rich (Hydrocharitaceae). The latter have fine elongated leaves arranged in rosettes, and are found totally submerged under water. A Mimosaceae (*Neptunia oleracea* Lour.) bearing yellow inflorescences and long floating stems provided with spongy floats at the internodes is also found in such regions. But the more striking vegetation is probably *Lemna polyrrhiza* L., a very tiny floating green plant covering the entire surface of small pools. Yet another plant is *Eichhornia crassipes* Solms. (Tam. Akasathamara) met with here and there along the watercourses.

The trees commonly growing in tanks which remain most of the time, dry are *Acacia arabica* Willd. (Tam. Karuvelamaram), with black bark. The tall *Vetiveria zizanioides* (L) Nash (Gramineae) (Tam. Vettiver) with big tufts of leaves could also be spotted in these regions.

Another group of hygrophytes could also be distinguished by its ecology. They grow on the banks of the tanks or rivers but not in the water. They may get accidentally immersed during very heavy rains (October-December). One of them is *Rotala densiflora* Koehne occurring in abundance. It measures only ten centimetres in height and flowers chiefly in January. Under the same ecological conditions, *Linnophyton obtusifolium* Mig., with its spear-shaped or lanceolate leaves makes its appearance. One could also find several other species such as *Eriocaulon sieboldianum* S. et Z., *Linnophila indica* (Linn.) Druce, *Monochoria vaginalis* Presl., *Dopatrium junceum* Buck-Ham., *Utricularia flexuosa* Vahl with yellow flowers, *Scirpus articulatus* L. the big Cyperaceae, and *Ceratopteris thalictroides* Linn. a fern which is common on the slightly shaded banks of ponds.

One of the most characteristic species of this ecology is a small bamboo called *Arundo donax* L.

Among the same group of species growing along the watercourse mention must be made of two very characteristic trees or shrubs: *Butea monosperma* (Lamk.) Taub. (Tam. Palasamaram) which abounds in flowers in the beginning of March giving a magnificent reddish-orange colour to the banks, and *Pongamia pinnata* (Linn.) Pierre (Tam. Punkamaram) which is totally deciduous for a few days every year.

The flora of the halomorphic soils and sand-dunes:

(i) Plants of the halomorphic soils.

The *halomorphic soils* are the alluvial soils which may be periodically inundated by a film of brackish water. These salty terrains are sandy and clayish. Their flora is particularly well represented in the neighbourhood of lagoons in the south of Pondicherry town. The vegetation is a short green-sward (10 cm. in height) of which three species of Cyperaceae and three of Gramineae are noteworthy, viz *Fimbristylis spathacea* Roth., *Kyllinga monocephala* Roth. (Tam. Muttai-korai), *Cyperus arenarius* Retz., *Eragrostis riparia* (Willd.) Nees, *Tragus biflorus* Schult. and the more common *Aeluropus lagopoides* (L.) Trin.

In the Ariyankuppam area one would come across a good number of herbaceous or semi-woody species tolerating the slightly saltish soils: *Portulaca pilosa* Linn., *Pedaliium murex* L. (Tam. Anai-Nerinji), *Jussieua perennis* (Linn.) Brenan, *Corchorus acutangulus* Lam. and *Pupalia lappacea* Mog.

With the decrease in the clay content of the soil, the floristic composition changes. The noteworthy species are: *Boerhaavia diffusa* L. (Tam. Sattaranai), *Physalis minima* L. (Tam. Thakkali), *Acalypha lanceolata* Willd., *Leucas aspera* Spr. (Tam. Tumbai), *Commelina benghalensis* L. (Tam. Kanavalai), the two most common Gramineae. [*Chloris barbata* Sw. (Tam. Mayil Kondai Pul) and *Brachiaria distachya* (L.) Stapf], the four Compositae [*Tridax procumbens* L., *Emilia sonchifolia* DC., *Eclipta alba* Hassk (Tam. Karisalankanni) (Mal. Kyonni) *Vernonia cinerea* Less.], and the three small sized shrubs *Abutilon hirtum* G. Don. (Tam. Tutti), *Corchorus Urticaefolius* W. et A., *Crotalaria verrucosa* L. (Tam. Gilugilupai).

Wherever the drainage is inadequate, one may note such plants as *Prosopis juliflora* D.C., *Clerodendrum inerme* Gaertn., a small bush, and very rarely *Avicennia officinalis* L. which is a species of mangroves. In some localities *Pandanus tectorius* Sol. (Tam. Thazhampoo) grows along the watercourse (Eng. Screw-pine).

(ii) Plants of the sand-dunes.

The only woody plant group noticed near the sea is that of *Casuarina equisetifolia* Forst characterised by its needle-like leaves. They are grown along the sea coast and are mostly cultivated for fire-wood. Among the herbs growing on the sand, the most noteworthy species is a spinous Gramineae, *Spinifex littoreus* (Burn.f.) Merr. (Tam. Ravananpul). More often *Ipomaea pes-caprae* Sweet (Convolvulaceae) which is a quick spreading creeper, *Bulbostylis barbata* Kunth (Cyperaceae), growing in small tufts, and *Gisekia pharnaceoides* L. (Tam. Manalkirai) also occur in that ecology.

In addition to these four very common and spontaneous species must be added several others which colonise the dunes more often through the influence of men. It is the case with coastal trees introduced many years ago in Asia and in many other parts of the world.

Hibiscus tiliaceous L. (Tam. Nirparutti) is a shrub or a small tree (Malvaceae), bearing large yellow flowers which eventually turn red.

Terminalia catappa L. (Tam. Amantimaram or Badam maram) is a deciduous Combretaceae with large obovate leaves, defoliating towards the middle of February and putting forth new leaves very rapidly, i.e. in just eight days. Towards the end of February it is covered by young leaves and inflorescences (Eng. 'Indian' or 'Malabar almond').

Calophyllum inophyllum L. (Tam. Punnamaram) and *Coccoloba uvifera* L. (Tam. Kadalkodimundirimaram) do not shed their leaves. They commence flowering at the same time as *Terminalia catappa* or sometimes towards the middle of March (Eng. 'Alexandrian laurel' or 'Dilo oil tree').

Lannea grandis (Dennst.) Engl. (Tam. Odiyamaram) is a deciduous tree (Anacardiaceae) which sheds its leaves, in general, slowly between the 1st and 15th of April. During the same time the very distinct white-greenish inflorescences appear on the completely defoliated branches (Eng. 'Wodier wood').

The flora of the 'ferruginous sandstones' :

The soils developed on the sandstones known as "Cuddalore sandstones" are generally very poor in organic matter and rich in quartz gravel. The vegetative landscape is essentially composed of tall palms [*Borassus flabellifer* L. (Tam. Panaimaram) and *Phoenix sylvestris* (L) **Roxb** (Tam. Iccamaram)] the small *Phoenix* with very short stipe [*Phoenix humilis* **Royle** var. *pedunculata* (Tam. Kattu-Iccamaram)] and cashewnut trees *Anacardium occidentale* L. (Tam. Mundiri) (Mal. Kolamavu) which are distributed widely on these soils, particularly around Dhanwantarinagar (Gorimedu).

The other bushy or shrubby species are spinous. They grow in groups but not in dense formations. The uncovered soil appears almost everywhere as the vegetation does not form a continuous cover. In spite of the unfavourable conditions caused by the high permeability of the sandstones, the flora is not poor. The principal species may be cited here.

In the much eroded sites along the ravines one notes generally two shrubs devoid of spines, but not grazed by cattle [*Dodonaea viscosa* L. (Tam. Virali) *Cassia auriculata* L. (Tam. Avarai)] and a Gramineae characterised by its long awns: *Heteropogon contortus* **Beauv.**

On these stony or rocky earth, one may meet generally the very spinous bushes, natural pioneers on barren soils: *Dichrostachys cinerea* **W et A.**, (Tam. Vadataram) *Securinega leucopyrus* (**Willd.**) **M. Arg.** (Tam. Mappullandi) and chiefly *Randia dumetorum* **Lam.** (Tam. Marukkarai). They give some protection to soil from direct insolation and erosion which enable the small plants like *Chrysopogon fulvus* (**Spreng.**) **Chioy.** (Gramineae), *Lepidagathis cristata* **Willd.** (Tam. Karappan Pundu), *Phyllanthus niruri* L. (Tam. Kilanelli) etc., to multiply abundantly.

On passing these very poor terrains, one comes across a number of herbaceous species more or less dispersed. Their principal characteristic is their extreme resistance to the dry conditions of the soil and the air.

Most of them have a vast geographical distribution. The well represented family is that of Leguminosae, with more or less trailing species partially covering the soil. The principal twelve species are:

—*Alysicarpus monilifer* **DC.** known in Asia and Africa; flowers July—October;

—*Crotalaria medicaginea* **Lam.** var. *herniarioides* **Baker**, flowers September — January ;

—*Desmodium biarticulatum* **Benth.** known in Asia and Australia; flowers mainly July—October;

—*D. triflorum* **D.C.** pantropical; flowers mainly June --November;

—*Eleotis monophylla* (**Burm.f.**) **DC.** known in India and Sri Lanka only; flowers mainly July --October;

—*Indigofera enneaphylla* **L.** (Tam. Sivapu Nerinji) known in Asia and Australia; flowers mainly August—December;

—*Rhynchosia aurea* **DC.** known almost everywhere in tropical Asia; flowers October - -December.

—*Rothia trifoliata* **Pers.** India and Sri Lanka; flowers October–December

—*Stylosanthes mucronata* **Willd.** Asia and Africa; flowers mainly July—November;

—*Tephrosia hirta* **Ham.** India and Africa; flowers June—November;

—*T. maxima* **Pers.** India and Sri Lanka only; flowers June—November;

—*Zornia diphylla* **Pers.** pantropical; flowers July -October.

The main herbaceous Euphorbiaceae are the following:

—*Euphorbia corrigioloides* **Boiss.** endemic of the South Indian flora;

—*Phyllanthus niruri* **L.** (Tam. Kilanelli) pantropical; flowers mainly May--December;

—*Phyllanthus rotundifolius* **Kl.** India and Africa; flowers mainly July--October;

—*Sebastiania chamaelea* **M. Arg.** (Tam. Eliamanaku) paleotropical; flowers mainly June—October.

The other common species which belong to various families are mentioned below:

—*Mollugo pentaphylla* **L.** Aizoaceae; herbaceous; widely distributed in tropical Asia;

—*Oldenlandia umbellata* **L.** (Tam. Sayaver) Rubiaceae; known in Asia and Africa;

—*Merremia tridentata* Hall. f. a very common Convolvulaceae, known in Asia and Africa;

—*Andrographis echinoides* Nees. (Tam. Kopurantangi) an Acanthaceae of India and Sri Lanka; slightly abundant;

—*Perotis indica* O. Ktz. an Asiatic Gramineae;

—*Bulbostylis barbata* Kunth. a pantropical Cyperaceae usually very frequent along with *Evolvulus alsinoides* L. (Tam. Vishnukirāndi), a pantropical Convolvulaceae;

—*Justicia prostrata* Gam. an Acanthaceae known in India and Sri Lanka only;

—*Cassytha filiformis* L. (Tam. Erumaikottan) Lauraceae; a small parasitic twining herb; pantropical.

Some of these hilly tracts were formerly under cultivation and then abandoned. The pioneer flora of these sandy fallow lands is composed always of very characteristic weeds:

—*Borreria hispida* K. Sch. (Tam. Natai Suri), a pantropical Rubiaceae; flowers July—November.

—*Leucas lavandulifolius* Rees. Labiateae of India and Africa; flowers July—October;

—*Cyperus compressus* L. (Tam. Kottukorai), a beautiful Cyperaceae, in glumes during rainy season;

—*Sida rhombifolia* L. (Tam. Sitramutti), a pantropical Malvaceae which also flowers during rainy days;

—*Polycarpaea corymbosa* Lam. a small pantropical Caryophyllaceae.

To this robust herbaceous flora should be added a woody flora isolated or restricted to protected ditches well-supplied with water. This woody flora represent most often the reconstitution stages of a forest cover, the evolution of which is arrested by biotic factors. The well represented woody plants are naturally spinous.

—*Zizyphus oenoplia* Mill. (Tam. Kottai), Rhamnaceae of Asia and Australia; flowers July—November;

—*Acacia leucophloes* Willd. (Tam. Velvelamaram), Mimosaceae of Asia; flowers October—November;

—*Atalantia monophylla* Corr. (Tam. Kattu-Narangam), Asiatic Rutaceae; flowers August—January;

—*Capparis stylosa* DC. Capparidaceae known only in South India;

—*Gmelina asiatica* L. (Tam. Nilakkumilamaram), an Asiatic Verbenaceae; flowers throughout the year;

—*Carissa spinarum* L. (Tam. Kalacedi), an Asiatic Apocynaceae; flowers July—December;

—*Hugonia mystax* L. (Tam. Motirakkanni), Linaceae of India and Sri Lanka flowers June—November;

—*Pterolobium indicum* A. Rich., Caesalpiniaceae; typically Indian; flowers September—October.

Among those species devoid of spines, the following may be mentioned:

—*Ixora parviflora* Vahl., a Rubiaceae of India and Sri Lanka which flowers practically throughout the year;

—*Maba huxifolia* Pers., a palaeotropical Ebenaceae; flowers in March—April;

—*Morinda coreia* Buch-Ham. (*M. Tinctoria* Roxb.). (Tam. Nunamaram), an Asiatic Rubiaceae; leaves used as fodder;

—*Albizzia amara* Boiv. (Tam. Turinjil) a palaeotropical Mimosaceae; flowers March—May.

The climbers are considerably numerous. The most common and remarkable ones are:

—*Abrus precatorius* L. (Tam. Kunrimani), a pantropical Papilionaceae; flowers September—November;

—*Rivea hypocrateriformis* Choisy. (Tam. Pottikkirai), a typically Indian Convolvulaceae; flowers November—January;

—*Gloriosa superba* L. (Tam. Kalappaikkilanku), a splendid Liliaceae of Asia and Africa with large red flowers from September to December;

—*Sarcostemma brevistigma* W. et A. (Tam. Kody Kalli), an Asclepiadaceae with chlorophyllous stem, almost circular in section and devoid of leaves; known almost everywhere in tropical Asia; flowers from May to October;

—*Cissus quadrangularis* L. (Tam. Pirandai), a Vitaceae of Asia and Africa; has green stem as above, but quadrangular in cross-section with few small leaves; flowers July—November;

—*Ventilago maderaspatana* Gaertn. (Tam. Vempadam), a Rhamnaceae reaching the top of the bushes; widely distributed in tropical parts of Asia; flowers during dry season (February and March).

There are no epiphytes in these areas and the Orchidaceae are rare except *Eulophia epidendrea* C. Fisch. a terrestrial one which develops on very dry red soils. It is in flowers in February and March. This plant is known only in India, particularly in the Western Ghats, Andhra Pradesh and the South of the Peninsula.

In the depressions two types of common grasses are located:

—*Aristida adscensionis* L. (Tam. Siru Tudappam Pul) and *A. setacea* Retz (Tam. Tudappam Pul), both of which are used for making brooms. In addition to this, *Cymbopogon flexuosus* Wats. is also spotted frequently on the dry soils.

The avenue trees:

The flora growing along the roadsides is considerably rich in woody species. It consists of a number of very beautiful trees, some with straight and regular trunks reaching upto 20 metres and others with shorter trunks but of great economic value:

—*Albizia lebbek* Benth. (Tam. Vakai); Mimosaceae. A popular shade tree; sheds its leaves from December to the end of March. The tree blossoms at the beginning of April when young leaves make their appearance. Its wood is used in carpentry. Tannin is extracted from its bark. (Eng. 'Siris tree' or 'East Indian Walnut').

—*Azadirachta indica* Juss. (Tam. Veppamaram), a Meliaceae very common along the roads. Usually this tree does not defoliate but its leaves turn yellow progressively from December to March; flowers in April. Its fruits and leaves are extensively used in medicine. Popularly known as *Neem tree* or *Margosa*, it serves also as fodder and manure.

—*Crataeva nurvala* **Buch-Ham.** (Tam. Mavilinka); an arborescent Capparidaceae rarely found in Pondicherry. Near the Pondicherry railway station there is one tree covered with yellow flowers in September and October, during which time the tree is deciduous. New foliage sprouts in the course of October.

—*Cassia stamea* **Lomk.** (Tam. Karunkonrai) Caesalpiniaceae. A small sized ornamental tree which is in full bloom in November and December. Flowers are yellowish-orange. Utilised also for silviculture in many countries.

—*Ficus benghalensis* **L.** (Tam. Alamaram), a Moraceae with hanging aerial roots; defoliates for some days in April. Grows spontaneously in India and Sri Lanka. The figs of banyans are edible. Leaves are used as fodder for sheep. The latex exuded from this tree is of mediocre quality.

—*Ficus glomerata* **Roxb.** (Tam. Athimaram). As common as the preceding one on the roadsides. It sheds its leaves in March or at the beginning of April. Its fruits are eaten; the leaves constitute a fodder very rich in protein.

—*Ficus hispida* **L.f.** (Tam. Kattu athimaram). It is practically an evergreen bush or small tree with big leaves used as fodder for cattle. Fruits are eaten.

—*Ficus religiosa* **L.** (Tam. Aracamaram or Asvattha) is one of the big trees very common in the garden along the roadsides and in the villages. Totally deciduous for some days in April. The wood may be utilised in match-box industry. (Eng. Peepal).

—*Heloptelea integrifolia* **Planch.** (Tam. Ayamaram). This more or less deciduous tree (Ulmaceae) seems to have no other use than as a shade tree yielding fire wood. Covered with fruits in September—October.

—*Madhuca longifolia* **(L.) MacBride var. longifolia Van Royen.** (Tam. Iluppaimaram) Sapotaceae. Its leaves resemble that of the mango tree but easily distinguishable in the early days of March when the flowers make their appearance alongwith tender leaves. The seeds contain a fatty oil and the corollas of the flowers are edible. (Eng. 'South Indian Mahua' or 'Mowra butter tree').

—*Parkinsonia aculeata* **L.** (Tam. Pachaivelanmaram), Caesalpiniaceae. A very thorny shrub with green branches introduced from tropical America. Particularly attractive between 15 January and 15 February when it is covered with yellow flowers. Its leaves serve as a good fodder.

—*Salmalia malabarica* (DC.) Schott. et Endl. (Tam. Mullilavu)—Bombacaceae known in all warm parts of Asia upto Malaysia. In Pondicherry it is rare. Entirely deciduous in March and April when it is covered with big red decorative flowers. Trees have buttressed trunks (Eng. 'Cotton wood tree' or 'Silk cotton tree').

—*Samanea saman* (Jacq.) Mer. (Tam. Tumkumuncimaram) | Mimosaceae. A native of Central America, it is one of the very big trees with voluminous foliage. Its shape, nearly symmetric, resembling an umbrella, is very characteristic. Defoliates sometime in March and flowers from April to July. The wood is tender. Its leaves and pods are used for numerous purposes. (Eng. 'The Rain tree').

—*Syzygium cumini* (L) Skeel. (Tam. Campunavalmaram) Myrtaceae. An evergreen with opposite leaves, met frequently along the roads. Fruits are very much appreciated. Flowers in January and February. (Eng. 'Black plum' or 'Indian blackberry').

—*Tamarindus indica* L. (Tam. Puliymaram). This Caesalpiniaceae is certainly the most common tree planted on the highways. Practically evergreen, its fruits are plucked from March to May. (Eng. 'Tamarind tree').

—*Thespesia populnea* Cav. (Tam. Puvarasam). A Malvaceae which never reaches a big size on the east coast. It is an evergreen tree, with cordate, long petiolated leaves. Flowers are yellow and bloom abundantly from January to March. Its foliage is often used as green manure. (Eng. Indian tulip or Portia tree).

The hedge plants

They include a select collection of several species in addition to *Parkinsonia*, *Thespesia*, *Ficus hispida* etc. One often finds here a very leafy Acanthaceae (*Adhatoda vasica* Nees) (Tam. Adatodai) measuring about two to three metres in height with white flowers, abundant in March and April; a bushy Convolvulaceae (*Ipomaea carnea* Jacq.) with big rose flowers. In the gardens one often finds a soft wooded shrub of two to three metres in height: *Jatropha curcas* L. (Tam. Kattu-Amanaku) Euphorbiaceae. (Eng. 'Physic nut' or 'Purging nut').

Very often a dense row of quick growing bushes or small trees, spiny as well as unarmed ones, are used as fencing; the spiny species to keep off cattle and vermin, and the spineless ones as windbreaks; at times used also as ornamental plants. The most common spiny undershrubs are the species of agave, particularly *Agave sisalana* Perr. (Eng. 'Sisal hemp') *Opuntia dillenii* Haw. (Tam. Nakatali) (Eng. 'Prickly pear'), *Euphorbia antiquorum* L. (Tam. Sadurakkalli) a tall, thorny, leafless succulent plant, *Cereus hexagonus* L. etc.

The principal fast growing hedge-trees bearing flowers are the following:

—*Thevetia neriifolia* Juss. (Tam. Manjal Alari) has an elegant and dense foliage. (Eng. Yellow Oleander or Trumpet-flower);

—*Lantana camara* L. a dense shrub, somewhat thorny with big clusters of orange, pink or white coloured delicate flowers;

—*Vitex negundo* L. (Tam. Nocci) a shrub or a small tree with purplish blue flowers and densely tomentose leaf-stalks. (Eng. 'Indian Privet'). Besides these, *Ricinus communis* L. (Tam. Amanaku) (Eng. 'Castor oil plant'), *Calamus rotang* L. (Tam. Pirambu) (Eng. 'Ratan palm'), *Bambusa arundinacea* Retz. (Tam. Mungil) the common bamboo and *Pedilanthus tithymaloides* are also grown as hedge-plants.

Small climbing plants commonly growing with the hedges are: *Leptadenia reticulata* W. et. A. (Tam. Palaikkodi), *Melothria maderaspatana* Cogn. (Tam. Musumusukai), *Coccinia indica* W. et A. (Tam. Kovai) and *Casalpinia bonduc* Baker., full of spines and of greater dimensions.

Mentioned here are certain roadside plants that can be found in the hedges:

—*Anisomeles malabarica* R. Br. (Tam. Pey-Marutti), a Labiatae which may exceed one meter in height;

—*Calotropis gigantea* R. Br. (Tam. Erukku) Asclepiadaceae;

—*Croton bonplandianum* Baill. (Tam. Eliamanaku) a much branched small Euphorbiaceae;

—*Argemone mexicana* L. (Tam. Prematandu), a Papaveraceae with prickly leaves and yellow flowers;

—*Cassia occidentalis* L. (Tam. Peyavarai), a sub-shrub with compound leaves, etc.

The Ornamental plants :

These are plants, more or less rare, which are chiefly grown in the gardens for ornamental purposes.

In this context mention may be made of the palms other than

<i>Borassus flabellifer</i> L.	(Tam. Panaimaram). (Eng. Palmyra palm).
<i>Cocos nucifera</i> L.	(Tam. Tennai maram). (Eng. Coconut tree).
<i>Areca catechu</i> L.	(Tam. Pakkumaram). (Eng. Arecanut tree) and
<i>Phoenix sylvestris</i> Roxb.	(Tam. Iccamaram). (Eng. Wild date palm).

All these four palms are cultivated for their economic value.

To this may be added the principal plants (most of them woody) grown in the gardens of Pondicherry.*

The fourteen species of palms which we find in Pondicherry are mostly very beautiful trees :

—*Calamus rotang* Brandis is a *rattan palm* distributed from India to Indo-China. Stem very long, slender and scandent.

—*Caryota urens* L. (Tam. Kuntalpanaimaram). Monocarpic as *Corypha*. From the base of the leaf sheath and from the petiole are extracted very strong fibrous cords. (Eng. Fishtail palm).

—*Chrysalidocarpus lutescens* H. Wendl. Although like *Ptychosperma macarthur* mentioned below, its foliar segments are numerous, very long and thin. Native of Madagascar.

—*Coccothrinax argentea* Sargent. It grows to a height of 10 to 12 metres; leaves green above, almost silvery below. There is a good specimen at the Pondicherry Head Post Office. Native of West Indies (San Domingo) (Eng. Silver thatch palm.).

—*Corypha umbraculifera* L. (Tam. Kudaippanai). A monocarpic palm; bears fruit once and dies thereafter. For ages its leafblades were used to write the ancient texts and sacred records. (Eng. Talipot palm.).

*For the plants grown in the Ashram's gardens, see Bibliography "Anonymous".

—*Latania loddigesii* **Mart.** A native of Mauritius, this palm has leaves like that of *Borassus* but the stem is covered with the fallen leaf-bases. It is useful only for thatching. A male palm may be met with in the garden at Raj Nivas, Pondicherry.

—*Livistona chinensis* **R. Br.** "This is perhaps the commonest and finest fan palm in Indian Gardens." ²⁹ One can identify this palm by the drooping tips of the mature leaves. A native of Central China.

—*Phoenix pusilla* **Gaertn.** is a shrubby palm having a very short trunk covered by persistent leaf bases. Common near the sea. Its fruits are edible. Native of South India and Sri Lanka.

—*Pritchardia pacifica* **Seem. et H. Wendl.** A native of Hawai, it has leaves like that of *Borassus* but easily distinguished from the leaves of other palms by their very big size. Its stems are short—five to eight metres usually. Fruits are round and of about 1.3 cm. in diameter.

—*Ptychosperma macarthurii* **Labill.** A very elegant cluster palm, usually small—three to four metres in height. Stems are thin, 2.5 to 7.5 cm. long and greenish. Native of New Guinea.

—*Ptychosperma elegans* **Bl.** is usually taller than the former but solitary. Native of the Northern and Eastern Coasts of Tropical Australia.

—*Rhapis excelsa* **Bl.** is a small palm, native of Southern China. Its leaves are palmate with 5–10 segments of 2.5 cm. width and 25 cm. length. The stem in small clusters, is densely covered with leaf-bases. (Eng. Lady palm).

—*Roystonea regia* **Kth.** "There is nothing in the palm family to quite equal the tall, majestic, stately appearance of the Cuban royal palm." ³⁰ The trunk reaching upto about 20 metres in height, has a very smooth whitish surface. A number of them are found in the Botanical Garden at Pondicherry.

—*Pandanus tectorius* **Sol.** (Tam. Talai). Though not strictly a palm, it is mentioned here for the sake of record. This Pandanaceae grows spontaneously along the watercourses where it forms dense thickets.

The following are the principal woody, ornamental and useful plants/trees represented in the gardens*:

—*Adansonia digitata* L. (Tam. Totimaram). This is a deciduous tree, the biggest and perhaps also the oldest one in our region. Only one specimen has been seen in a garden, at Swadeshi Cotton Mills. Introduced from Africa, two or three hundred years ago, it measures about 20 metres in diameter (Malvaceae). Flowers August—October (Eng. Baobab).

—*Aegle marmelos* Corr. (Tam. Vilvam). Shrubby Rutaceae; flowers in April—May; fruits are of therapeutic value and are used for curing alimentary canal disorders. (Eng. 'Bael tree' or 'Bengal Quince').

—*Allamanda cathartica* L. A very ornamental climbing shrub (Apocynaceae) with large yellow flowers and whorls of three or four leaves. Native of Brazil.

—*Antigonon leptopus* Hk. et A. A very beautiful climber (Polygonaceae), introduced from tropical America. (Eng. 'Coral creeper').

—*Araucaria cookii* R. Br. ex D. Don. An evergreen conifer with whorled branches, native of New Caledonia. Often used as 'Christmas tree' (Eng. 'New Caledonia pine').

—*Beaumontia multiflora* Teijam et Binn. A very big climbing shrub, macrophyllous, with superb, yellowish-white inflorescence. (Apocynaceae). Flowers in January and February.

—*Berrya cordifolia* (Willd). Burret (Tam. Cavantalai). An arborescent deciduous Tiliaceae, often met with in South India. It does not occur in a spontaneous condition. (Eng. 'Trincomalee wood').

—*Bougainvillea* spp. A climbing shrub with curved spines and terminal flower heads.

—*Caesalpinia bonduc* Baker. A lianous Caesalpiniaceae; very spinous; widely distributed and cultivated in the littoral regions; flowers in October; fruits ripen in February; produces the 'Bonduc nut' especially used for making a tonic.

* Some trees like,

Mangifera indica L. (Eng. Mango tree) (Tam. Mamaram).

Annona squamosa L. (Eng. Custard apple) (Tam. Sittapala).

Citrus grandis Osbeck (Eng. Pomпельmoose) (Tam. Pompalimas).

are often cultivated in gardens for their fruits.

—*Caesalpinia pulcherrima* Swartz. A very handsome shrub with compound leaves. Its red or orange flowers are arranged in erect terminal raceme. (Eng. 'Dwarf Poinciana' or 'Peacock flower').

—*Carica papaya* L. (Tam. Pappalimaram). A soft wooded tree usually unbranched and with leaves clustered at the top. (Eng. 'Melon tree' or Papaw').

—*Cassia marginata* Roxb. (Tam. Cenkonrai) (*C. roxburghii* DC.). An arborescent Caesalpiniaceae of Sri Lanka and South India; flowers in October and November.

—*Cassia fistula* L. (Tam. Carakkonrai). A shrubby Caesalpiniaceae having big leaflets and long blackish pods. It is more common in Mahe than in Pondicherry. Flowers always in April and May. (Eng. 'Indian Laburnum').

—*Ceiba pentandra* (L.) Gaertn. (Tam. Ilavum). An introduced Bombacaceae; deciduous; commences flowering at the beginning of March with fruits ripe in May; known also as "the white silk cotton tree" (the true Kapok tree).

—*Cicca acida* (L.) Merrill (Tam. Arinellimaram), a shrubby Euphorbiaceae; deciduous; fruits edible.

—*Coccoloba uvifera* L. (Tam. Kadalkodimundirimaram). An evergreen Polygonaceae introduced from West Indies; common in the gardens near the sea; leaves are practically sessile and persistent. (Eng. 'Sea grape').

—*Cordia sebestena* L. An evergreen Boraginaceae introduced from West Indies. This bush is cultivated for its splendid coral-red inflorescence (February to June).

—*Couroupita guianensis* Aubl. (Tam. Nakalinkam). An evergreen Myrtaceae cultivated for its very beautiful flowers and remarkable structure.

—*Delonix regia* Rafin. (Tam. Mayirkkonraimaram). A deciduous Caesalpiniaceae. Its beautiful flowers are in bloom from April to July. (Eng. 'Flamboyant flame tree').

—*Duranta repens* L. Engl. A bushy Verbenaceae with small leaves and small blue flowers in cymes, borne throughout the year.

—*Erythrina variegata* L. var. *orientalis* (L.) Merrill (Tam. Kaliyanamurunkai). Another arborescent Leguminosae; deciduous; bears magnificent scarlet inflorescences in February and March. (Eng. 'Coral tree' or 'Mochi tree').

—*Gliricida sepium* (Jacq.) Walp. A deciduous Leguminosae with short trunk and dense foliage made of graceful, thin, hard pointed leaflets. This shade tree is found in plenty in Raj Nivas, Pondicherry. (Eng. 'Madre Tree' or 'Mother of cocoa').

—*Guettarda speciosa* L. (Tam. Pannirmaram). An evergreen shrubby Rubiaceae which flowers and produces fruits from April to June.

—*Guazuma ulmifolia* Lam. (Tam. Tenpaccai). An evergreen Sterculiaceae, introduced from Mexico and frequently met with in gardens. Fruits are eaten. (Eng. 'Bastard Cedar').

—*Hibiscus rosa-sinensis* L. (Malvaceae) (Tam. Cemparattai). Represented here by many varieties.

—*Jacquemontia caerulea* Choisy is a small climber (Convolvulaceae) introduced from Latin America; covered with blue flowers in February and March.

—*Jasminum* spp. (Tam. Mallikai). We find four important species of jasmine 'Oleaceae' cultivated in Pondicherry: *J. azoricum* L., *J. grandiflorum* L., *J. sambuc* Alt., *J. sessiliflorum* Vahl.

—*Kigelia pinnata* DC. (Tam. Marachurai). An evergreen Bignoniaceae. This grows to the size of a mango tree. Easily distinguishable by its cylindrical fruits hanging from the branches. Flowers from February to April-May.

—*Lagerstroemia indica* L. (Tam. Kadalimaram). A deciduous shrub with pinkish flowers borne throughout the year. This Lythraceae is a native of China.

—*Lawsonia inermis* L. (Tam. Marutonri). Another shrubby Lythraceae introduced from Persia. Flowers are white. More common on the Western Coast (Mahe) than in Pondicherry. (Eng. 'Henna plant' or 'Mignonetta tree').

—*Leucaena Leucocephala* (Lamk.) de Wit. A Mimosaceae of small size, more or less deciduous, with white glomerules. In March, the small trees are mostly covered with fruits. Seeds are used for making ornamental handbags, necklaces, etc.

—*Michelia champaca* L. (Tam. Sanpakam). A beautiful evergreen with light green foliage. (Magnoliaceae). The essence extracted from its flowers is famous in perfumery. (Eng. 'Yellow Champak tree').

—*Millingtonia hortensis* L. f. (Tam. Maramallikai). An evergreen Bignoniaceae covered with long white inflorescence in November. (Eng. 'Indian cork tree' or 'tree jasmine').

—*Mimusops elengi* L. (Tam. Maghizhamaram or Makutamaram). An evergreen Sapotaceae with edible fruits. Wood is durable. (Eng. 'Bullet-wood tree' or 'Indian Medlar').

—*Morinda coreia* Buch-Ham. (Tam. Nunamaram). An evergreen Rubiaceae, of small size met with frequently on waste lands. Wood is of reddish hue and very subtle.

—*Moringa oleifera* Lam. (Tam. Murunkaimaram). An unarmed small tree which produces the "ben oil" used as a fixative of perfumes. Its fruits, twigs and leaves are used as vegetables.

—*Murraya paniculata* (L). Jack. (Tam. Katarkonci). An evergreen bush (Rutaceae) often grown in the gardens for its fragrant flowers. This flowers five to six times every year. Each flowering period lasts for a few days. (Eng. 'Chinese box' or 'Chinese myrtle').

—*Nerium indicum* Mill. (Tam. Alari) (Apocynaceae). A native of West Asia, bearing clusters of pink flowers. Leaves are narrow, verticillate, three at each node. (Eng. 'The Indian Oleander').

—*Nyctanthes arbor-tristis* L. (Tam. Pavalamallikaimaram). A large deciduous shrub (Verbenaceae) with quadrangular branchlets, opposite leaves and flowers without stalks, opening at night and shedding early morning. (Eng. 'Coral Jasmine' or 'Indian Mourner').

—*Peltophorum pterocarpum* (DC.) Backer. A Caesalpiniaceae, deciduous in December. Very common in the garden facing Raj Nivas. Flowers mostly in March and April. (Eng. 'Yellow gold mohur' or 'Rusty shield-bearer').

—*Plumeria alba* L. (Tam. Cimai alari). A deciduous bush (white champa). Apocynaceae. Its bark is chlorophyllous. (Eng. 'Frangipani').

—*Polyalthia longifolia* Thw. (Tam. Acoku). An evergreen tree (Annonaceae) of considerable height. Its natural shape is fusiform. (Eng. 'Cemetery tree' or 'Mast tree' or 'Indian fir').

—*Pongamia pinnata* (L.) Pierre (Tam. Punkamaram). A Papilionaceae, deciduous for a very short period from 15th to 30th January. Flowers from the beginning of February and reconstitutes its foliage at the same time. (Eng. 'Pongam oil tree' or 'Indian beech').

—*Punica granatum* L. (Tam. Matulaimaram). This small tree is well known for its fruits, the Pomegranates.

—*Quisqualis indica* L. (Tam. Rangoon Malligai). A native of Malay Archipelago, with splendid flowers in tube "pale pink to deep crimson in drooping clusters".³¹ (Combretaceae). This climber is known as 'Rangoon creeper'.

—*Ravenala madagascariensis* Sonnerat (Tam. Viciri Vazhai). A Scitamineae whose large banana like leaves form a fan like crown. (Eng. 'Travellers' palm').

—*Sambucus racemosus* L. The only Caprifoliaceae known here with white flowers. In bloom from March to May. (Eng. 'European Red Elder').

—*Stemmadenia galeotiana* Miers. An arborescent Apocynaceae from Cuba with big showy white flowers from February to April.

—*Sterculia foetida* L. (Tam. Kutiraippitukkan). A deciduous Sterculiaceae covered with flowers of foetid smell at the start of February when the digitate young leaves also appear. The large red fruit has an opening on the side. (Eng. 'Bastard Poon Tree').

—*Zizyphus mauritiana* Lamk. (Tam. Ilantamaram). A medium sized tree (Rhamnaceae) with drooping spiny branches. (Eng. the 'Chinese date' or 'Indian plum').

Karaikal Region:

Situated as it is in the Kaveri delta, the irrigation facilities permit the cultivation of rice over large areas. The sugar-cane (*Saccharum officinarum* L.) (Tam. Karumbu) is cultivated here only as a subsidiary crop. The cultivation of millets is very little or practically nil.

The natural vegetation, much altered by human agencies, consists of numerous plants of littoral regions which could tolerate the briny sand or the brackish waters and naturally also of, most of the aquatic species. Species of the dry terrains such as *agaves*, *Euphorbia antiquorum* L. (Tam. Isadurakkalli) *Acacia leucophloea* Willd. (Tam. Velvelamaram) *Albizzia lebbek* Benth (Tam. Vakai) etc., are very rare. Thus the flora of Karaikal differs from that of Pondicherry in spite of the nearly identical climates of these two places.

The seashore plants:

Among the littoral species tolerating a certain amount of salinity in the soil and in the water, the following five are the most common and remarkable ones :

—*Excoecaria agallocha* L. (Tam. Tillai) is a small tree found in abundance on the banks of Arasalar often with lichens living on its terminal branches;

—*Clerodendrum inerme* Gaertn. (Tam. Sangankuppi). A shrub with opposite leaves and long white corolla-tubes;

—*Acanthus ilicifolius* L. (Tam. Kaludai Mulli). A shrubby Acanthaceae of tidal forests; very gregarious; easily identified by its holly-like leaves and blue flowers;

—*Solanum trilobatum* L. (Tam. Tudulai). A very prickly trailing undershrub on the coastal sand;

—*Pandanus tectortus* Sol. (Tam. Talai) is often found as a natural hedge near the coast.

Apart from these quite conspicuous species, a herbaceous and greatly diversified flora of smaller dimensions is prevalent in the littoral regions. Here one could find herbs characteristic of salt-marshes and coastal sands, viz.

—*Salicornia brachiata* Roxb. (Tam. Umarikirai). A curious fleshy and branched undershrub without leaves;

—*Sesuvium portulacastrum* L. another fleshy plant, herbaceous and prostrate, with purplish flowers and reddish stem and leaves;

—*Aeluropus lagopoides* Trin. ex Thw. a short wiry grass with small leaves;

—*Spinifex littoreus* Merr. (Tam. Ravananpul). A very gregarious woody grass, conspicuous on the coastal sands, having globose and spiny inflorescence.

Near the sea can be met many species of weeds which are prevalent almost everywhere in the driest parts of the Indian Peninsula. Prominent among them are the following:

—*Tridax procumbens* L. (Compositae). A perennial herb with opposite leaves, mostly confined to the base of the plant;

—*Bulbostylis barbata* Kunth. A sedge known in all plain districts;

—*Aristolochia bracteolata* Lamk. (Tam. Aduthinnapalai) a bad smelling perennial herb; met with as a climber sometimes;

—*Pedaliium murex* L. (Tam. Anainerinji). A somewhat fleshy herb with opposite leaves and yellow flowers;

—*Trianthema triquetra* Rottl. (Tam. Siru Sharanai). A prostrate Aizoaceae with small, fleshy and mucilaginous leaves;

—*Opuntia dillenii* Haw. (Tam. Nakatali). A leafless fleshy herb, with stem green and flattened, bearing long spines. (Eng. Prickly Pear);

—*Boerhaavia diffusa* L. (Tam. Sattaranai). A diffusely branching herb with small red flowers. (Eng. the 'Spreading Hog-weed').

Among the littoral species, the plants which tolerate very little traces of salinity of soil and thrive well on the coastal-sands are *Cocos nucifera* L. (Tam. Tennaiamaram) (Eng. Coconut palm) and also the shrubby and very spinous *Prosopis spicigera* L. much planted for shade along the sea-coast.

A little interior in the country, on the sea-sands, appear the *Casuarina equisetifolia* Forst. (Tam. Cavukkumaram), *Hibiscus tiliaceus* L. (Tam. Nirparutti) and *Thespesia populnea* Cay. (Tam. Puvarsam). The last two trees belonging to the Malvaceae family are almost identical but *Hibiscus* differs from *Thespesia* by its larger leaves and round indehiscent fruits.

Alongwith these plants thrive some herbaceous or suffrutescent ones, very conspicuous everywhere:

—*Croton bonplandianum* Baill. (Tam. Eliamanaku). A woody herb with numerous branches; sometimes used as green manure; a native of Paraguay;

—*Calotropis gigantea* R. Br. (Tam. Erukku). A milky and shrubby plant with opposite-sub-sessile leaves, whitish at their lower surface (Eng. 'Gigantic swallow-work');

—*Jatropha glandulifera* Roxb. (Tam. Adalaycedi) is often raised as a hedge plant in Karaikal; has serrate and gland tipped leaves;

—*Datura fastuosa* L. (Tam. Karu-umatai). A robust herb with solitary, big trumpet shaped flowers, often found in waste lands. (Eng. 'Thorn-apple' or 'Devil's trumpet').

Plants growing near or in fresh water:

In this region, where fresh water runs abundantly throughout the year, the hygrophytic flora is naturally well developed. A good number of hygrophytes can be met with near Uzhiapattu (Niravi Commune). The principal plants growing along the water edges are given below:

(i) Arborescent vegetation.

This comprises essentially the trees planted on the bunds of rice fields such as *Borassus flabellifer* L. (Eng. Palmyra palm; Tam. Panaimaram) and *Acacia arabica* Willd. (Tam. Karuvelamaram; Eng. 'Babul tree'), a spiny evergreen tree with black bark, adapted to the soils saturated with water for several months in a year.

Along the irrigation canals the three small but very frequently met trees are:

Barringtonia acutangula Gaertn. (Tam. Samutirappalai) easily distinguishable in August, by its long, pendant, inflorescences with small flowers of reddish hue; (the foliar buds and tender leaves are reported to be edible);

Pongamia pinnata (L.) Pierre (Tam. Punkamaram). The oil extracted from its seeds is of industrial and medicinal value. (Eng. 'Pongam oil tree' or 'Indian beech');

Phoenix sylvestris Roxb. (Tam. Iccamaram) is tapped for its sap. (Eng. 'Wild date palm' or 'Date sugar palm').

It may be observed that *Phoenix humilis*, although very common in Pondicherry is practically absent in Karaikal.

(ii) Shrubby and herbaceous hygrophytic vegetation.

One does not come across in Pondicherry *Hemarthria compressa* L. the tall grass which grows along the banks of irrigation canals of Karaikal. It seems to have an ecology similar to that of *Arundo donax* L. These two species grow together on the banks. Also a few plants like the wild species of *Hibiscus* (*H. vitifolius* L.) (Tam. Manjal Tutti) with yellow flowers (April-August) are found in their company.

Among the most common plants we may record *Tribulus terrestris* L. (Tam. Nerinji) a small herb covered with silky hairs and a native of Mediterranean regions, (Eng. the 'Ground Burnut'); *Indigofera enneaphylla* L. having many trailing branches and another Papilionaceae, *Tephrosia purpurea* Pers. (Tam. Kolinji) a branching undershrub with violet flowers, often used as green manure.

Near the running water, big tufts of *Saccharum spontaneum* L. (Tam. Peykarumbu) producing excellent fodder for buffaloes (Eng. the 'Wild Sugar-cane'), and *Stachytarpheta indica* Vahl. (Tam. Simai nayuruvi) having characteristically long terminal spikes with small blue tubular flowers are well established (Eng. 'Aaron's Rod').

In the ponds and pools, *Nymphaea pubescens* Willd. (Tam. Alli) is common with its large and long petioled leaves (Eng. 'Water Lily'). The very small green floating plants (*Lemna polyrrhiza* L.) are also well represented (Eng. 'Duck weeds'). They disappear when there is a wild flow of water. When the water is a little deeper, one generally notices *Ipomaea reptans* Poir. (Tam. Vellaikirai) a slender twining aquatic herb floating on the surface, thanks to the white spongy floats around the stem; *Asteracantha longifolia* (L.) Nees. (Tam. Nirmulli) is a tall herb with opposite sessile leaves and spindles as long as 2.5 cm.; *Stemodia viscosa* Roxb. (Scrophulariaceae) is an annual herb and a very common weed with pale violet flowers found in moist places; *Neptunia oleracea* Lour is a Leguminosae with floating stems bearing white spongy floats and flowers in yellow heads; *Phyla nodiflora* (L.) Greene (Tam. Poduthalai) is a creeping herb with very small pinkish flowers in dense spikes, etc.

Mention may also be made of *Sesbania aegyptiaca* Pers. (Tam. Karuncembai) cultivated or growing wildly near water. At Uzhiapattu (Niravi Commune) one would come across plenty of these erect woody shrubs with yellow flowers in August.

The avenue trees :

They are not much diversified and in all about 10 species could be recognised. In Karaikal town, *Polyalthia longifolia* Hk. f. & T. a handsome evergreen tree easily recognised, thanks to its fusiform shape and leaves bulged near the margins, is grown mostly. Along the roadsides *Thespesia populnea* Cav. (Tam. Puvarasam) are abundantly planted.

Here and there one could notice besides Tamarind, a few *Syzygium jambolanum* Lamk. (Tam. Navalmaram), *Samanea saman*. (Jacq.) Merr., (Tunkumuncimaram), *Ficus benghalensis* L. (Tam. Alamaram), *Lannea coromandelica* (Houtt.) Merr., *Madhuca longifolia* (L.) MacBride (Tam. Iluppaimaram) and rarely *Kigelia pinnata* DC. (Tam. Marachurai).

The hedge plants :

The most common species spotted in the hedges is *Jatropha glandulifera* Roxb. (Tam. Adalaycedi) sometimes growing alone or in the company of some other bushes such as *Vitex nequundo* L. (Tam. Nocci), *Morinda tinctoria* Roxb., *Prosopis spicigera* L., *Banbusa arundinacea* Willd. (Tam. Mungil) *Lawsonia inermis* L. (Tam. Marutonri), *Ficus hispida* L. f. (Tam. Kattu attimaram) and rarely *Zizyphus mauritiana* Lam. (Tam. Ilantamaram) and *Aegle marmelos* Corr. (Tam. Vilvam). All these plants have been recorded in the flora of Pondicherry.

The succulent plants *Euphorbia antiquorum* L. (Tam. Sadurakkalli) and the agaves with prickly leaves are not well represented in Karaikal, but *Cissus quadrangularis* L. (Tam. Pirandai) a branching succulent climber with green angular stem grows spontaneously.

The garden plants :

One does not come across any plant that is unknown in Pondicherry. Moreover, the gardens in Karaikal are not as big as those of Pondicherry and here one finds essentially the useful plants. There are very few varieties of ornamental plants.

Certain trees like the Teak (*Tectona grandis* L.) (Tam. Tekkumaram) are grown for their timber; *Moringa oleifera* Lamk. (Tam. Murunkaimaram) is grown in the garden for its fruits used as vegetable; *Azadirachta indica* Adr. Juss. (Tam. Veppamaram), for its reddish wood resembling that of mahogany (Eng. 'Margosa tree'); *Terminalia catappa* L. (Tam. Amantimaram), for its edible seeds and its durable light red wood. (Eng. 'Indian almond').

Furnished below are the names of principal trees and shrubs met with in the gardens of Karaikal:

Areca catechu L. (Tam. Pakkumaram), *Bougainvillea glabra* Choisy., *Carica papaya* L. (Tam. Pappalimaram), *Cassia fistula* L. (Tam. Carakkonrai) *Ceiba pentandra* (L.) Gaertn. (Tam. Ilavam), *Cicca acida* (L.) Merr. (Tam. Arinellimaram) *Corypha umbraculifera* L. (Tam. Kudaippanai), *Croton* spp., *Delonix regia* Rafin. (Tam. Mayirkkonraimaram), *Ficus religiosa* L. (Tam. Aracamaram), *Hibiscus* spp., *Leucaena glauca* Benth., *Caesalpinia pulcherrima* Swartz., *Roystonea regia* Kth. etc.

Mahe Region:

From the floristic point of view, the region of Mahe is situated in the "occidental floral Domain more particularly in the Malabar Sector."³² The ecology of this 'domain' with its hot and humid bioclimates (annual rainfall of more than 2,000 mm. and a dry season of about four months), facilitates the development of beautiful dense forests, semi evergreen or practically evergreen. But there are no natural vegetational types in this region.

The spontaneously growing species are found along the routes, in the fallow grounds, on the coast and also along the course of slightly brackish water, particularly in Pandakkal.

What is attempted here is not to enumerate all the plants growing in the region but to enlist the principal characteristics of its flora.

The spontaneous flora:

It consists of two vegetational groups: one characteristic of the western humid regions and therefore unknown in the eastern regions of Pondicherry, Karaikal or Yanam; the other one common in the plains and the littoral regions of the East and the West.

(i) Proper vegetation in the western region :

The more remarkable species of the first group are the following:

—*Ampelocissus arnottiana* **Planch.** (Mal. Semparavalli). A voluminous climber (Vitaceae) capable of reaching the taller branches of the trees. It is in flowers and fruits from March to June. Known also in Sri Lanka.

—*Ervatamia heyneana* **Cooke** (Mal. Kundalapala). A small tree or bush endemic in the western regions. This Apocynaceae is easily identified by its fruits: two curved yellowish-orange coloured follicles.

—*Holigarna arnottiana* **Hook. f.** (Mal. Chera) (Tam. Karumcharai). A tall Anacardiaceae practically evergreen. Typical of occidental forests at low altitude, its soft-wood is useful for many purposes, particularly in constructing canoes.

—*Jasminum malabaricum* **Wight.** Large climbing shrub (Oleaceae) with white fragrant flowers.

—*Kaempferia* sp. A small Zingiberaceae of about 10 cm. in height, with yellow flowers (April-June). Found around gardens and on walls of waste lands.

—*Leea sambucina* **Willd.** (Mal. Nyeru, Maniporandi). This Vitaceae is a large evergreen shrub or a small tree with compound leaves. Very common in places of humid climate but rare elsewhere. Flowers March-June.

—*Osbeckia wynaadensis* **Cl.** A bushy Melastomaceae with a preference for wet places. Endemic in the 'occidental floral domain' at low altitude with very beautiful violet or purplish red flowers (December-June).

—*Parsonsia spiralis* **Wall.** A climber (Apocynaceae) growing in many tropical Asian countries. However in India this grows only in the western regions. Leaves are opposite and reach about 12 cm. in length.

(ii) *Spontaneous vegetation of wide distribution:*

Enumerated here are mostly herbaceous species dispersed by man and growing along the roads, in abandoned fields, etc.

—*Alternanthera sessilis* **R. Br.** (Mal. Kozhuppa). A pantropical Amarantaceae, growing along the bunds of irrigated fields.

—*Aristida sectacea* **Retz.** A tall Graminea found in many other Asian countries (Burma, Sri Lanka). It grows to a height of more than one metre. Leaves are linear and narrow.

—*Barringtonia acutangula* **Gaertn.** (Mal. Nir Perzha). A small evergreen tree (Lecythidaceae) often found along the watercourse in many Asian countries. Flowers March-June.

—*Blumea membranacea* **DC.** A Compositae growing in many countries of tropical Asia chiefly under dry climates. The one met with in Mahe is the variety called *gracilis* a sub-form small in size.

—*Blumea wightiana* **DC.** Taller than the preceding one, its strong odour is very characteristic. Found in almost all palaeotropical countries.

—*Centella asiatica* **Urban.** (Mal. Kodangal). A trailing and rooting Umbelliferae commonly found on the border of rice fields and easily identified by its orbicular-cordate leaves.

—*Clerodendrum infortunatum* **L.** (Mal. Paragu, Vatta perivelam). A small sized bush (Verbenaceae) distributed in the most humid regions, chiefly near villages. Often grows to a big size, with opposite leaves and white flowers (December-May). Known also in Malaysia.

—*Clerodendrum thomsonae* **Balf.** Introduced from Africa. Flowers are white or scarlet.

—*Coldenia procumbens* **L.** A pantropical Boraginaceae known in all the regions of the Union Territory. Easily identified in abandoned rice fields or in dried up tanks where it forms a covering layer over the soil.

—*Datura fastuosa* **L.** var. *Alba* **C.B. Clarke.** A tall, somewhat succulent herb (Solanaceae), known almost everywhere in India and Africa, mostly along the roadsides.

—*Derris scandens* **Benth.** (Mal. Ponnammavalli). A climbing Papilionaceae known in all forests of South India. Found also in Australia. Flowers April-June.

—*Drynaria quercifolia* **L.** An epiphytic fern growing throughout the Indian plains.

—*Euphorbia thymifolia* L. (Mal. Chitrapala). An annual, prostrate, pantropical weed. Met with in almost all plain districts of India.

—*Heliotropium indicum* L. (Mal. Thekkada, Ven-pacha). A Boraginaceae having the same distribution as the former.

—*Lagerstroemia speciosa* (L.) Pers. (Mal. Manimaruthu). A large tree (Lythraceae) covered with purple-lilac flowers in terminal panicles, from April to June. (Eng. 'Pride of India' or 'Queen flower').

—*Melanthesa rhamnoides* (Retz.) Bl. (Mal. Kattuniruri). An Asiatic shrub (Euphorbiaceae) known in wet as well as dry plains and slopes. Leaves are small and numerous.

—*Micrococca mercurialis* Benth. (Mal. Kunuku-thooki). An Euphorbiaceae common as a weed in most plain districts of South India. Recorded also in Africa.

—*Mimosa pudica* L. (Mal. Thotta vadi). Introduced in India from tropical America, it grows mostly on wet roadsides of most plain districts. (Eng. 'Sensitive plant').

—*Oldenlandia corymbosa* L. This Rubiaceae is one of the most common pantropical weeds, able to thrive on wet as well as on very dry waste lands.

—*Polycarpon tetraphyllum* L. A small annual Caryophyllaceae, introduced from Europe; known also in Africa and in Australia.

—*Premna latifolia* Roxb. (Mal. Knappa). An evergreen shrub (Verbenaceae) common in the dry littoral regions of the Carnatic, but met with rarely in the Malabar coast. Distribution in India and Sri Lanka.

—*Stachytarpheta indica* Vahl. (Mal. Katapunuttu). An herbaceous, Verbenaceae which may grow to a height of one metre; common in all humid places, at low altitude; flowers blue; probably introduced.

—*Stachytarpheta mutabilis* Vahl. Generally taller than the former species; flowers are violet or rose in colour.

—*Triphasia aurantiola* Lour. A spiny pantropical shrub (Rutaceae). Fruits are edible (Eng. Myrtle-lime).

—*Vitex altissima* L. f. (Mal. Mayilai). An arborescent Verbenaceae; deciduous; known only in India and Sri Lanka; petiole winged. In Mahe it is well represented at Pallur.

It should now be evident that except for *Cereus*, succulent plants are rare in Mahe region. Except some Rubiaceae (*Meyna laxiflora* Robyns., *Randia malabarica* Lam.) and Rhamnaceae (*Zizyphus*. spp) plants, there are very few thorny plants here.

Three more spontaneous plants encountered in Mahe may be mentioned here: *Eupatorium* sp., *Rourea santaloides* W et A. (Mal. Kuriel) *Hyptis suaveolens* Poit.

Some more species already noted in Pondicherry are also found in Mahe: *Boerhaavia diffusa* L. (Mal. Thamizhama), *Calotropis gigantea* R. Br. (Mal. Erukku), *Cassia occidentalis* L. (Mal. Ponnaveeram), *Crotalaria verrucosa* L., *Eclipta alba* Hassk. (Mal. Kyonni), *Ipomaea carnea* Jacq. *Lantana aculeata* L. (Mal. Arippu), *Leucas aspera* Spr. (Mal. Thumba), *Murraya paniculata* (L.) Jack., *Pandanus tectorius* Spl. (Mal. Kaitha) etc.

The cultivated flora :

Mahe is richly endowed with an extraordinary density of the woody vegetation in the gardens and in the fields. From a purely floristic point of view it may be noted that many trees of Mahe are also present in Pondicherry; *Cocos nucifera* L. (Mal. Tenga), *Artocarpus integrifolia* L. (Mal. Pila), *Areca catechu* L. (Mal. Adakka), *Casuarina equisetifolia* Forst. (Mal. Mooli), *Mangifera indica* L. (Mal. Amram Mavu), *Anacardium occidentale* L. (Mal. Kolamavu), *Cicca acida* (L.) Merr. (Mal. Aranelli, Kirinelli), *Thespesia populnea* Cav. (Mal. Porasu), *Gliricidia sepium* (Jacq.) Walp. etc.

Marked differences naturally caused by climates are however not hard to find. For example, *Bauhinia acuminata* L. a pretty shrub with white flowers *Macaranga* sp., *Averrhoa carambola* L., *Ailanthus malabarica* DC. (Mal. Pongilyam Mattipal) etc., so common in Mahe are either rare or absent in Pondicherry. Species such as *Cassia fistula* L. (Mal. Konna), *Tectonia grandis* L.f. (Mal. Thekku) are very frequent in Mahe.

Yanam Region :

Yanam is different from the other three regions both geographically as well as by the nature of its soils. Without a seaside façade, the region extends upto one of the tributaries of the river Gautami Godavari in the south and the Coringa River in the east. During strong tidal waves and in times of cyclones (more often from September to November) sea-water rises along the watercourse, invading the low lands of Yanam, particularly the Isukatippa islands and the Adivipolam plain.

Yanam's is essentially an adventitious flora accompanying paddy cultivation and a flora of halomorphic soils in which salt concentration is so much that they cannot be utilised for agriculture. Its garden flora is not so diversified.

The adventitious flora :

Rice (*Oryza sativa* L.) (Tel. Vadlu) covers only about 566 hectares of the 895 hectares of cultivable lands in the region. The other principal cultivated plants are coconut (*Cocos nucifera* L.) (Tel. Kobbari, Tenkai) (75 hectares), ground-nut (*Arachis hypogaea* L.) (Tel. Verusenagalu) (97 ha.) chilly (*Capsicum frutescens* L.) (45 ha.), coriander (*Coriandrum sativum* L.) (Tel. Dhaniyalu) (80 ha.). The bananas (*Musa* sp.) are cultivated only in some gardens. The spontaneous plants growing along with the cultivated ones are nearly all species commonly seen on the bunds of rice-fields. This flora is considerably rich and does not seem to have a distinct annual cycle. Throughout the year, in fact, one could collect the principal species.

One of them particularly is met with frequently around the fields: *Martynia annua* L. (Tel. Garuda Mukku) (Tam. Puli-nagam), a Pedaliaceae with large leaves and long peduncles. Native of Mexico. (Eng. Tiger claw).

One of the most conspicuous herbaceous weed on the margins of rice-field is *Phyla nodiflora* (L.) Greene. (Tel. Gajapippala kada) (Tam. Puduthalai), a prostrate and creeping plant, rooting at the nodes with pink flowers in short conical spikes.

Under similar condition or environment one may come across three other creeping plants: *Cayratia carnos*a Gagnep (Tel. Kurudinne), a fleshy twining plant; *Merremia emarginata* Hallier f. (Tel. Elika-jemudu), a filiform creeping and rooting Convolvulaceae often infesting the fields; and *Melothria maderaspatana* Cogn. (Tel. Noogudosa), a fleshy scabrous climber, which flowers almost throughout the year.

A few other common herbaceous species may also be cited here:

—*Trianthema portulacastrum* L. (Tel. Galijeru) (Tam. Saranai), a prostrate, much branched, fleshy herb which is one of the most conspicuous weeds in cultivated lands;

—*Acalypha indica* L. (Tel. Kuppinta chettu) (Tam. Kuppai-meni), an erect, herbaceous Euphorbiaceae, very common after the rains in waste lands;

—*Phaseolus aconitifolius* Jacq. (Tel. Mitckelu) (Tam. Tulukka Payir). Sometimes cultivated as a fodder or pulse crop (Eng. Kidney-bean or Field gram);

—*Ocimum adscendens* Willd. (Labiatae) which may be considered as a weed ;

—*Synostemon bacciforme* (L.) Web. a herbaceous Euphorbiaceae, more common here than elsewhere in the Territory;

—*Cyperus procerus* Rottb. a Cyperaceae with fine, slender stem; very common on the borders of rice-fields;

—*Gomphrena decumbens* Jacq. (Tel. Neeru bogadabanti), a diffusely branched Amarantaceae, clearly distinguishable by its branches prostrate near the stem, ascending at the ends and bearing white spikes.

To these may be added the plants that grow in the fields as well as along the roadsides or on the old walls of Yanam:

—*Gynandropsis pentaphylla* DC. (Tel. Vavinta) (Tam. Kattu kadugu), a familiar herbaceous weed with its characteristic pungent odour (Eng. Caravelle seed);

—*Chloris barbata* Sw. (Tel. Uppu Gaddi) a grass, with inflorescences digitately arranged in spikes on the top of the peduncles;

—*Heliotropium indicum* L. (Tel. Nagadunti) (Tam. Thelkodukkupundu) an annual, herbaceous Boraginaceae found in moist places;

—*Portulaca quadrifida* L. (Tel. Gorri Geddam) (Tam. Siru Pasarai) a small, prostrate, fleshy plant known throughout the tropics;

—*Brassica juncea* (L.) Czern. et Coss. (Eng. Leaf mustard);

—*Argemone mexicana* L. (Tel. Brahmadandu) (Eng. Mexican Poppy);

—*Boerhaavia diffusa* L. (Tel. Atika Mamidi) (Eng. The spreading hog-weed);

—*Hibiscus hirtus* L.;

—*Cardiospermum halicacabum* L. (Tel. Buddakakara);

—*Passiflora* sp.;

—*Cassia occidentalis* L. (Tel. Kasivinda);

—*Croton bonplandianum* Baill. (Tel. Kukka mirapa) etc;

—*Jatropha gossypifolia* **Roxb.** (Tel. Nela Amudam), a very common hedge plant in Karaikal, is rarely met with in Yanam. On the contrary, on the banks of all the canals of the Gautami Godavari delta grows *Argyrea cymosa* Sweet., a bushy Convolvulaceae, with its characteristic large pink corollas.

The halophytic flora:

The more typical and also widely distributed vegetational community consists of halophytes covering such important places in the low lands of Adivipolam and the islands which are seasonally inundated or flooded by sea-water.

From the physiognomical point of view, the formation is dense and nearly homogenous resembling a thicket with an average height of one metre. The clayey soil is present almost everywhere between the plants. Two woody bushes are very common:

Excoecaria agallocha L. (Tel. Tilla) and *Avicennia officinalis* L. (Tel. Mada). The latter has very characteristic opposite leaves with whitish lower surfaces. Its creeping roots give out at intervals the pneumatophores or respiratory organs which are about 30 cm. above the soil.

The most popular species is *Suaeda monoica* **Forsk.** (Chenopodiaceae) (Tel. Koyyalakura) a suffrutescent with fleshy and terete leaves, circular in cross section and eaten by fishermen. Some other species may also be mentioned here:

—*Sesuvium portulacastrum* L. a succulent, prostrate, rooting herb;

—*Heliotropium curassavicum* L. another fleshy herb of the salt marshes which is glaucous;

—*Salicornia brachiata* **Roxb.** (Tel. Koyyalu), a leafless Chenopodiaceae very frequent in salt marshes of the East Coast.

Some other species are found mixed with these:

—*Fimbristylis spathacea* **Roth.** a Cyperaceae;

—*Aeluropus littoralis* **Parl.** a small Gramineae with prostrate stem;

—*Myriostachya wightiana* (Nees ex Steud.) **Hook. f.** a tall and stout Gramineae found growing in the beds of tidal rivers in most of the coasts of tropical Asia;

—*Prosopis spicigera* L. (Tel. Chani) is abundant.

One does not come across in Yanam any of the true mangrove trees such as *Rhizophora*, *Ceriops*, *Sonneratia*, etc. However, they have been reported not far from this region, for example in Kakinada and Amalapuram of Andhra Pradesh. But *Acanthus ilicifolius* L. (Tel. Etichilla), *Suaeda maritima* Dum., *Dalbergia spinosa* Roxb. (Tel. Chillanki), *Clerodendrum inerme* Gaertn. (Tel. Takkolakamu), *Aegiceras corniculatum* Blanco. (Tel. Dudumara), have been observed along the canals with brackish waters penetrating the soils.

The woody vegetation in the saline medium is being continuously cut for firewood by fishermen.

Trees of Yanam :

Except the coconut palm, the palmyra palm, *phoenix sylvestris* Roxb. (Tel. Pedda-ita), *Prosopis spicigera* L. (Tel. Chani) and *Acacia arabica* (Tel. Nalla tuma), the other tree species are thinly represented. Such trees as Tamarind (*Tamarindus indica* L.) (Tel. Chinta), Banyan (*Ficus benghalensis* L.) (Tel. Mari, Pedda-mari), Pipal (*Ficus religiosa* L.) (Tel. Poppali), Neem (*Azadirachta indica* Juss.) (Tel. Yapa, yepa), Mango (*Mangifera indica* L.) (Tel. Mamadi) and *Syzygium jambolanum* Lamk. (Tel. Neradu) are also very rare.

Among the garden plants the following may be cited according to their order of decreasing abundance:

- Ficus hispida* L.f. (Tel. Brammadi Baddamari),
- Carica Papaya* L. (Tel. Boppayi),
- Psidium guajava* L. (Tel. Goyya),
- Terminalia catappa* L. (Tel. Nattubadamu),
- Emblica officinalis* Gaertn. (Tel. Usiriki),
- Achras sapota* L.,
- Ceiba pentandra* (L.) Gaertn. (Tel. Tellaburga),
- Mimusops elengi* L. (Tel. Pogada),
- Punica granatum* L. (Tel. Danimma),
- Spathodea campanulata* Beauv.

The bushes of *Adhatoda vasica* Nees are also seen growing.

The other trees that were introduced in Yanam, more particularly in the Botanical Garden, are described by Bigot in "*Le Jardin botanique de Yanaon*". As late as in 1950 he had listed about 160 species from this garden. In August 1972, after about twentytwo years, only about 80 species could be counted. The species identified are listed below:

- Adenanthera pavonina* L. (Tel. Bandi), Mimosaceae (Eng. Bead tree or Coral tree);
- Alpinia nutans* Roxb. Zingiberaceae;
- Anona squamosa* L. Annonaceae (Eng. Custard apple);
- Anona muricata*, Annonaceae (Eng. Sour-sop);
- Antigonon leptopus* Hk. et A. Polygonaceae;
- Asparagus racemosus* Willd. (Tel. Pilli-gaddalu) Liliaceae;
- Bassia latifolia* Roxb. (Tel. Ippa) Sapotaceae (Eng. Common Mohua);
- Bauhinia variegata* L. Caesalpiniaceae (Tel. Mandari) (Eng. Variegated Mountain Ebony);
- Bougainvillea spectabilis* Hook. Nyctaginaceae;
- Brownea ariza* Benth. Leguminosae;
- Butea frondosa* Roxb. Papilionaceae (Eng. Bastard Teak);
- Casuarina equisetifolia* Forst. (Tel. Chavukku) Casuarinaceae;
- Caesalpinia coriaria* Willd. (Tel. Dividivi) Caesalpinaceae (Eng. American Sumach);
- Catesbaea spinosa* L. Rubiaceae (Eng. Spinous lily thorn);
- Cinnamomum camphora* Nees. (Tel. Karpuramu) Lauraceae (Eng. Camphor tree);
- Citrus* sp. Rutaceae;
- Coccoloba uvifera* L. Polygonaceae (Eng. Seaside grape);

- Cochlospermum gossypium* DC. Bixaceae (Tel. Kandugogu) (Eng. The Torchwood tree);
- Cordia sebestena* L. Boraginaceae (Eng. Scarlet Cordia);
- Couroupita guyanensis* Aubl. Myrtaceae (Eng. Cannon ball tree);
- Cycas revoluta* L. Cycadaceae ;
- Dalbergia latifolia* Roxb. (Tel. Jitegi) Papilionaceae (Eng. East Indian Rosewood);
- Delonix regia* Rafin, Caesalpiniaceae (Tel. Shima Sankesula) (Eng. Flamboyant flame tree);
- Dracaena fragrans* Ker-Gawl. Liliaceae;
- Eucalyptus* sp. Myrtaceae;
- Euphorbia splendens* Boj. ex. Hook. Euphorbiaceae;
- Guaiacum officinale* L. Zygophyllaceae (Eng. Lignum Vitae tree)
- Gliricidia sepium* (Jacq.) Walp. Papilionaceae (Eng. Madura shade tree);
- Gloriosa superba* L. Liliaceae (Tel. Adivi-nabhi, Kalappah-gadda) (Eng. Malabar Glory Lily)
- Grewia aspera* Roxb. Tiliaceae;
- Holarrhena antidysenterica* (L.) Wall. Apocynaceae; (Tel. Pala, Kodaga) (Eng. The Easter tree);
- Hibiscus* spp.;
- Ixora* spp.;
- Jasminum* spp.;
- Kleinhovia hospita* L. Sterculiaceae;
- Latania* sp. Palmae;
- Livistonia* sp. Palmae;

- Lawsonia inermis* L. Lythraceae (Tel. Gorinta); (Eng. The henne plant);
- Malpighia coccifera* L. Malpighiaceae;
- Manihot glaziovii* Mull. Euphorbiaceae (Eng. Ceara Rubber tree);
- Morinda coreia* Buch-Ham. Rubiaceae (Tel. Togari, Maddi);
- Murraya paniculata* (L.) Jack. Rutaceae (Tel. Nagagolunga);
- Nerium indicum* Mill. Apocynaceae (Tel. Ganneru, Kastooripattelu (Eng. Indian Oleander);
- Ochna squarrosa* L. Ochnaceae;
- Oncoba spinosa* Forsk. Bixaceae;
- Pachira* sp. Bombacaceae;
- Pandanus tectorius* Sol. Pandanaceae (Tel. Mogali) (Eng. Nicobar Bread. fruit or Screw-Pine);
- Parmentiera cereifera* Seem. Bignoniaceae (Eng. Candle tree);
- Pereskia aculeata* Mill. Cactaceae;
- Phyllocactus nocturnas* L.—Cactaceae;
- Plumeria acuminata* Ait. Apocynaceae (Tel. Naruvarahaalu, Vaada Ganneru) (Eng. Pagoda tree);
- Poinsettia pulcherrima* Grah. Euphorbiaceae;
- Polyalthia longifolia* Hk. f. et. T. Annonaceae (Tel. Nara Maamidi) (Eng. Cemetery tree);
- Porana paniculata* Roxb. Convolvulaceae (Eng. The Bridal Creeper);
- Psidium quajava* L. Myrtaceae (Tel. Goyya) (Eng. Guava Tree);
- Ptychosperma macarthurii* Labill. Palmae. (Eng. MacArthur Palm);
- Quisqualis indica* L. Combretaceae (Tel. Rangonimalli) (Eng. Rangoon creeper);

- Roystonea regia* Kth. Palmae (Eng. The Cuban Royal Palm);
- Sapindus* sp. Sapindaceae;
- Saraca indica* L. Caesalpiniaceae (Tel. Asokamu) (Eng. Asoka tree);
- Spathodea campanulata* Beauv. Bignoniaceae; (Eng. Fountain tree);
- Tabebuia pentaphylla* Hemsl. Bignoniaceae;
- Tecoma* sp. Bignoniaceae;
- Wrightia tinctoria* R. Br. Apocynaceae (Tel. Tella pala).

While *Casuarina equisetifolia* (Tel. Chavukku) is extremely rare in Yanam, the cashew-nut trees (*Anacardium occidentale* L.) and *Barringtonia actuangula* Gaertn. which are very common in Karaikal, are totally absent in Yanam region.

Conclusion

Each region of Pondicherry territory has its own singular floristic aspect. For example, the flora of the Miocene sandstones of Pondicherry is unknown in other regions; the vegetation types of the 'occidental floral domain' that we find in Mahe are not met with in the other regions situated on the Eastern Coast; Karaikal is extremely rich in hygrophytes; in Yanam one finds many halophytes covering vast areas. Thus the flora of these four regions complement each other.

VI. Fauna

The fauna of Pondicherry, Karaikal and Yanam may be taken as essentially the same as that of the nearby districts of Tamil Nadu or Andhra Pradesh, the regions presenting practically the same physical, climatic and biotic features of the surrounding areas. The fauna of Mahe is more or less the same as that of the adjoining Malabar tract of Kerala. There are no major forests in the region, which at best contains only scarce, secondary, disturbed scrub jungle besides open trees and agricultural fields. The sea-board of the territory also does not exhibit any special feature. As such the fauna is limited and not spectacular so far as the larger species of wild life are concerned. By and large the fauna can be characterised as typical of the drier areas of Peninsular Indian plains.

Mammals :

There are about 54 species of mammals found in the area. Of the order Insectivora or insect eating small mammals, the commonest is the House Shrew (*Suncus murinus niger*). Two other species of House Shrews (*Suncus stoliczkanus* and *Suncus dayi*) may also be found occasionally. South Indian Hedgehog, *Paraechinus micropus nudiventris* may be rarely met with, while the Southern Tree Shrew *Anathana ellioti ellioti* may no longer be found here. Among Chiroptera or bats, both the frugivorous and insectivorous species are common. The frugivorous bats which do a certain amount of damage to orchards and fruit cultivations belong to the family Pteropidae and are of three species: *Pteropus giganteus giganteus* commonly known as Flying Fox, the short-nosed Fruit Bat *Cynopterus sphinx sphinx* and the Leschenault's Fruit Bat *Rousettus leschenaulti leschenaulti*. About twenty species of insectivorous bats belonging to five families are known to exist here. These include three species of Tomb bats (*Taphozous longimanus longimanus*, *T. melanopogon melanopogon* and *T. Saccolaimus crassus*); two species of False Vampires (*Megaderma spasma horsfieldi* and *M. lyra lyra*); two species of Horseshoe Bat (*Rhinolophus rouxi rouxi* and *R. luctus beddomei*); the Leaf-nosed Bat (*Hipposideros speoris speoris*); the Free-tailed Bat (*Tadarida plicata plicata*); three species of Pipistrelle Bats (*Pipistrellus coromandra coromandra*, *P. minus minus* and *P. ceylonicus*); two species of Yellow Bat (*Scotophilus temmincki wroughtoni* and *S. heathi heathi*); the Long winged Bat (*Miniopterus australis pisillus*); and the Hairy winged Bat (*Harpiocephalus harpid madrassius*).

Coming to the order of Primates to which apes, monkeys and man himself belong, commonest is the Bonnet monkey *Macaca radiata radiata* the common pale or red faced squat monkey. The Grey Langur *Presbytis entellus anchises*, the black faced slimmer monkey originally found in some areas probably no longer range in these areas. The slender Loris (*Loris tardigradus lydekkerianus*) is said to be almost non-existent in Pondicherry region now. The curious creature Scaly Anteater or Pangolin (*Manis crassicaudata*) is rarely met with.

Among the Carnivora, the larger cats like Tiger and Leopard are non-existent here. Of the lesser cats Rusty spotted Cat (*Felis rubiginosa rubiginosa*), the Leopard Cat (*Felis bengalensis bengalensis*) and the jungle Cat (*Felis chaus kelaarti*) were found here but except for the scarce occurrence of the latter, others are very rare now. Jackals (*Canis aureus naria*) and foxes (*Vulpes bengalensis*) are nowadays not so common. The Civet Cats and mongooses are represented by the common Palm Civet (*Paradoxurus hermaphroditus hermaphroditus*) rather rare, the small Indian Civet (*Viverricula indica indica*), the Grey Mongoose (*Herpestes smithi smithi edwardsi*) and occasionally Ruddy Mongoose (*Herpestes smithi smithi*).

No large wild herbivores such as deers, antelopes etc., occur as the area is devoid of any large forests.

Of the rodents (Rodentia) and their allies, hares and rabbits (Lagomorpha) there are many species. Blacknaped Hare *Lepus nigricollis nigricollis* could be found in some areas. The common three striped Palm Squirrel (*Funambulus palmarum palmarum*) is the commonest squirrel of our compounds and gardens. The Flying Squirrel *Petaurista petaurista philippensis* is extremely rare now. Porcupine (*Hystrix indica indica*) although rarely met with some years ago are no more found to exist in Pondicherry region. The murid group of rodents that include gerbilles, rats and mice includes several kinds, a menace to cultivation. The Gerbilla Rat (*Tatera indica cuvieri*), Mole Rat (*Bandicota bengalensis ok*), Large Bandicoot (*Bandicota indica indica*), Metad (*Millardia meltda*), Bush Rat (*Golunda ellioti ellioti*), the Field Mouse (*Mus booduga*) are all destructive to agriculture and plantations. The species found living in and around houses are the common House Rat (*Rattus rattus rattus* and *R. norvegicus*) and the House Mouse (*Mus musculus castaneus*). Other species of rats and mice which might be occasionally found in the area include Blanford's Rat (*Rattus blanfordi*), Fawn coloured Mouse (*Mus cervicolor phillipsi*), Brown Spiny Mouse (*Mus platythrix ramnadensis*) and the Tree mouse (*Vandeleuria oleracea nilagrica*).

In Mahe among the insectivora or insect eating small mammals the common House Shrew *Suncus murinus* (Linnaeus) and occasionally, Day's Shrew, *Suncus dayi* (Dobson) could be met with. Bats are of several kinds. There are three species of fruit eating bats viz., the Egyptian fruit bat *Rousettus leschenaulti* (Desmarest), the common Flying Fox *Pteropus giganteus giganteus* (Brünnich) and the short-nosed fruit bat, *Cynopterus sphinx* (Vahl). Others are mainly the smaller sized insectivorous bats. Species found in the area are: the lesser Rat-tailed bat *Rhinopoma hardwickei* Gray, the Tomb bat *Taphozous longimanus Hardwickei*, the Black-bearded Tomb bat *T. melanopogon* Temminck, the Malay False Vampire *Megaderma spasma* (Linnaeus) and the Indian False Vampire *M. lyra* Geoffroy; three species of Horseshoe bats: *Rhinolophus rouxi rouxi* Temminck, *R. gracilis* Anderson and *R. luctus beddomei* Anderson; two or three species of Leaf-nosed bats: *Hipposideros speoris* Schneider, *H. lankadiva* Kelaart and probably *H. bicolor fulvus* (Gray), the free-tailed bat *Tadarida tragata* (Dobson); three species of Pipistrelle: *Pipistrellus coramandra* (Gray), *P. minus minus* (Wroughton) and *P. ceylonicus indicus* (Dobson); two species of Yellow bats, *Scotophilus temmincki wroughtoni* Thoms and *S. heathi* (Horsfield); the long winged bat *Minopterus schreibersi fuliginosus* (Hodgson) and the beautiful painted bat *Kerivoula picta picta* (Pallas).

Of the monkeys, the Macaques are represented by the Bonnet Monkey *Macaca radiata radiata* (Geoffroy) and Langurs by *Presbytis entellus dussumieri* (Geoffroy).

Among the Carnivora, many species are commonly met with in the adjoining Malabar tract and it is possible that some of these may be occasionally found in Mahe. These include the Jackal *Canis aureus naria* (Wroughton), the Fox *Vulpes benghalensis* (Shaw), the Common Otter *Lutra lutra nairi* (F. Cuvier), the small Indian Civet *Viverricula indica indica* (Desmarest), the Palm Civet or Toddy Cat *Paradoxurus hermaphroditus hermaphroditus* (Pallas), Grey Mongoose *Herpestes edwardsi edwardsi* (Geoffroy), the Jungle Cat *Felis chaus kelaarti* (Pocock) and very rarely the Fishing Cat *Felis viverrina* (Bennett).

The common South Indian Blacknaped hare *Lepus nigricollis nigricollis* (F. Cuvier) is occasionally found. Rodents are mostly the house and field species found generally in Southern India, like the Squirrel *Funambulus palmarum palmarum* (Linnaeus) and various species of rats and mice. The porcupine *Hystrix indica indica* (Kerr) might sometimes visit from adjoining areas. A spiny Dormouse *Platanomys lasiurus* (Blyth) is often found in the Malabar and Mysore forest areas which might perhaps be still found here also. The species of rats and mice occurring in the region are: Long tailed Tree Mouse *Vandeleuria oleracea nilagirica* (Jerdon), the soft-furred Field Rat *Millardia melitaea melitaea* (Gray), the House Rat *Rattus rattus rufescens* (Gray), the Norway Rat *R. norvegicus* (Berkenhout) which is alien but introduced here as elsewhere also, the House Mouse *Mus musculus castaneus*, Water Mouse *Mus booduga booduga* (Gray), the little Field Mouse *Mus cervicolor phillipsi* (Wroughton) the Fawn coloured Mouse, the Brown spiny Mouse *Mus platythrix platythrix* (Bennett), the Bush rat *Golunda ellioti* (Gray), two types of bandicoots, the lesser *Bandicota benghalensis* (Gray) and the larger *Bandicota indica indica* (Bechstein) and finally the Gerbil *Tatera indica hardwickei* (Gray).

Marine mammals reported from Malabar coast and near Mahe are, the black finless Porpoise *Neomeris phocaenoides* (Cuvier), the Dolphin *Delphinus dussumieri* (Blanford) and Plumbeous Dolphin *Sotalia plumbea* (Cuvier). The Dugong (sea-cow) and Otter are also sighted near the shore.

TABLE—I

Mammals

<i>Scientific and common English names</i>		<i>Pondi- cherry</i>	<i>Karai- kal</i>	<i>Mahe</i>	<i>Yanam</i>
<i>Anathana ellioti</i> Waterhouse—Madras Tree-Shrew	..	+	+	—	—
<i>Suncus murinus</i> Linnaeus—House-Shrew	..	+	+	+	+
<i>Rousettus leschenaulti</i> Desmarest—Fulvous Fruit Bat	..	+	+	+	—
<i>Pteropus giganteus</i> Brünnich—Indian Flying Fox	..	+	+	+	+
<i>Cynopterus sphinx</i> Vahl—Short-nosed Fruit Bat	..	+	+	+	—
<i>Taphozous melanopogon</i> Temminck—Black-bearded Tomb Bat	..	—	—	+	—
<i>Taphozous saccolaimus</i> Temminck—Pouch-bearing Bat	..	+	+	—	—
<i>Megaderma spasma</i> Linnaeus—Malay False Vampire	..	+	+	+	+
<i>Megaderma lyra</i> Geoffroy—Indian False Vampire	..	+	+	+	+
<i>Rhinolophus rouxi</i> Temminck—Horse-shoe Bat	..	+	+	+	+
<i>Hipposideros speoris</i> Schneider—Schneider's Leaf-nosed Bat	..	+	+	+	—
<i>Hipposideros fulvus</i> Gray—Indian Bicoloured Leaf-nosed Bat	..	+	+	+	—
<i>Tadarida plicata</i> Buchanan—Wrinkled-lipped Bat	..	+	+	+	—
<i>Pipistrellus coromandra</i> Gray—Indian Pipistrelle	..	+	+	+	+
<i>Pipistrellus mimus</i> Wroughton—Indian Pygmy Pipistrelle	..	+	+	+	+
<i>Pipistrellus ceylonicus</i> Kelaart—Kelaarti's Pipistrelle	..	+	+	+	+
<i>Scotophilus kuhli</i> Leach—Lesser Yellow Bat	..	+	+	+	+
<i>Scotophilus heathi</i> Horsfield—Greater Yellow Bat	..	+	+	+	+

Scientific and common English names	Pondi- cherry	Karai- kal	Mahe	Yanam
<i>Kerivoula picta</i> Pallas—Painted Bat	+	+
<i>Macaca radiata</i> Geoffroy—Bonnet Monkey	+	—
<i>Presbytis entellus</i> Dufresne—Langur	+	+
<i>Canis aureus</i> Linnaeus—Asiatic Jackal	+	+
<i>Vulpes bengalensis</i> Shaw—Bengal Fox	+	+
<i>Melursus ursinus</i> Shaw—Sloth Bear	..	—	—	—
<i>Lutra lutra</i> Linnaeus—Common Otter	..	+	—	—
<i>Lutra perspicillata</i> Geoffroy—Smooth-coated Indian Otter.	—	—	+	—
<i>Viverra megaspila</i> Blyth—Large-spotted Civet	..	—	—	—
<i>Paradoxurus hermaphroditus</i> Pallas—Common Palm Civet.	+	+	—	+
<i>Paradoxurus jerdoni</i> Blanford—Jerdon's Palm Civet	..	+	+	+
<i>Herpestes edwardsi</i> Geoffroy—Indian Grey Mongoose	..	+	+	+
<i>Felis chaus</i> Guldenstaedt—Jungle Cat	—	—
<i>Felis rubiginosa</i> Geoffroy—Rusty-spotted Cat	+	—
<i>Sus scrofa</i> Linnaeus—Wild Boar	—	—
<i>Tragulus meminna</i> Erxleben—Mouse Deer	+	+
<i>Axis axis</i> Erxleben—Spotted Deer	+	+
<i>Cervus unicolor</i> Kerr—Sambar	+	+
<i>Tetracerus quadricornis</i> Blainville—Four-horned Antelope.	+	+	+	+
<i>Gazella gazella</i> Pallas—Mountain Gazelle	—	—
<i>Lepus nigricollis</i> Cuvier—Indian Hare	+	+
<i>Funambulus palmarum</i> Linnaeus—Indian Palm Squirrel.	+	+	+	+

Scientific and common English names	Pondi- cherry	Karai- kal	Mahe	Yanam
<i>Funambulus tristatus</i> Waterhouse—Jungle Striped Squirrel.	+	+	+	—
<i>Funambulus sublineatus</i> Waterhouse—Dusky Striped Squirrel	..	—	+	—
<i>Funambulus layardi</i> Blyth —Layard's Striped Squirrel	..	—	+	—
<i>Ratufa indica</i> Erxleben—Indian Giant Squirrel	..	+	+	+
<i>Millardia meltada</i> Gray—Soft-furred Field Rat	..	+	+	—
<i>Rattus blanfordi</i> Thomas—Blanford's Rat	..	+	—	+
<i>Rattus rattus</i> Linnaeus—House Rat	..	+	+	+
<i>Mus musculus</i> Linnaeus—House Mouse	..	+	+	+
<i>Mus booduga</i> Gray—Little Indian Field Mouse	..	+	—	+
<i>Mus cervicolor</i> Hodgson—Fawn-coloured Mouse	..	+	+	—
<i>Mus platythrix</i> Bennett—Indian Brown Spiny Mouse	..	+	—	+
<i>Bandicota bengalensis</i> Gray—Lesser Bandicoot Rat	..	+	+	+
<i>Bandicota indica</i> Bechstein—Large Bandicoot Rat	..	+	+	+

Birds :

Several species of resident or locally migratory birds are found in the area. In winter months this bird fauna is considerably enriched by the arrival of several more species of migratory birds from the north. Barring a few exceptions, most of the birds found in other parts of the plains of peninsular India occur here also.

A number of aquatic or waterfront species of birds can be found in and around the various irrigation tanks, ponds and canals or water courses.

Little Grebe or Dabchick (*Podiceps ruficollis*) is a drab coloured squat, tailless little water bird with silky white under parts, found in pairs or parties near water. The Spotbill or Grey Duck (*Anas poecilorhyncha*) is the size of domestic duck with brown scaly feather pattern, yellow tipped bill with two orange red spots at its base. Of the teals, only Cotton Teal (*Nettapus coromandelianus*) the

smallest of the wild ducks largely white is present. Another duck like bird sometimes found is the Nakta or Comb Duck (*Sarkidiornis melanotos*) black glossy blue and green above and white below with a swollen knob at the base of the bill. Flamingo (*Phoenicopterus roseus*) is familiarly met with. Not so common is the Chestnut Bittern (*Ixobrychus cinnamomeus*), a bird largely chestnut in colour as the name indicates. Another bittern is the Little Green Bittern (*Butorides striatus*) resembling paddy birds in general effect as bitterns do. Night Heron (*Nycticorax nycticorax*) ashy grey above with black back and white below, is nocturnal in habits. Paddy Bird (*Ardeola grayii*) an earthly brown bird at rest is quite common. Two egrets, the Cattle Egret (*Bubulcus ibis*) the common white bird seen around cattles, and the Little Egret (*Egretta garzetta*) similar but differentiated by the black bill, are present. Another common water front bird is Grey Heron (*Ardea cinerea*) a stork like bird with white, long, curved neck. Four species of storks are common: Open billed stork (*Anastomus oscitans*) greyish white, with black wings, Painted stork (*Ibis leucocephalus*) with a heavy yellow bill and face and rose pink on shoulders and wings, the Black necked Stork (*Xenorhynchus asiaticus*) with enormous black bill, head and neck and pied black and white wings and the White necked stork (*Ciconia episcopus*) a black stork with white neck and abdomen. Both Black Ibis and White Ibis (*Pseudibis papillosa* and *Threskiornis melanocephala*) with long, down curved bills are present. The Spoon Bill (*Platalea leucorodia*) can be easily identified by the large flat, black and yellow spoon shaped bill. Darter (*Anhinga rufa*) known also as snake-bird for its snake like neck and narrow head is met with rarely. Little Cormorant (*Phalacrocorax niger*) is another similar black duck like bird. Spotted billed or Grey pelican may be occasionally found. Lapwings, plover like birds of partridge size with fleshy wattles in front of eyes are represented by Yellow-wattled Lapwing (*Vanellus malabaricus*) and Red wattled Lapwing (*Vanellus indicus*). Commonest of the plovers is the Little Ringed Plover (*Charadrius dubius*) sandy brown above and white below with a complete white neck band. Near water courses one may find the River Tern (*Sterna aurantia*) coloured grey and white yellow bill and forked tail with a jet black cap on the head and nape in the summer. On the sea board, the Brownheaded Gull (*Larus brunnicephalus*) is quite common; so is the Blackheaded Gull (*Larus ridibundus*). Painted snipe (*Rostratula benghalensis*), metallic green with buff and black streaks above and brown and white below with long tip-cured bill may be occasionally seen in paddy fields. An Avocet with upturned beak was found near Thengathittu recently. Jacanas with spidery elongated toes are of two types, the Pheasant-tailed Jacana (*Hydrophasianus chirurgus*) and Bronzewinged Jacana (*Metopidius indicus*); both are very rare nowadays. The family of Rails and Coots is represented by the Coot (*Fulica atra*), a slaty black duck like bird with white bill and forehead, the Purple Moorhen (*Porphyrio porphyrio*), a purplish blue hen like bird with red bill and forehead, the Indian Moorhen (*Gallinula chloropus*)

slaty grey and brown with white under-tail red forehead and base of bill, and the white breasted Waterhen (*Amaurornis phoenicurus*). The purple Moorhen is said to be very rare.

Birds of open trees with scrub jungle or meadows and ploughed fields are numerous. Bustard Quail (*Turnix suscitator*) Button Quail (*Turnix tanki*) are common in grass land. True Quails also found in similar habitats include Jungle Bush Quail (*Perdica Asiatica*), Rain Quail (*Coturnix coromandelica*) and the common Grey Quail (*Coturnix coturnix*). The pheasants found include Grey and Painted Partridges (*Francolinus pondicerianus* and *F. pictus*) and Pea fowl (*Pavo cristatus*). Sandgrouses are represented by the Common Indian Sandgrouse (*Pterocles exustus*). The species of pigeons and doves usually met with are the Little Brown Dove (*Streptopelia senegalensis*), Ring Dove (*Streptopelia decaocto*), Spotted Dove (*Streptopelia chinensis*), Red Turtle-Dove (*Streptopelia tranquebarica*), Emerald Dove (*Chalcophaps indica*), Blue Rock Pigeon (*Columba livia*) and the Green Pigeon (*Treron phoenicoptera*). Emerald dove and green pigeon are very rare.

Birds of prey commonly found in the area are vultures like the White Scavenger Vulture (*Neophron percnopterus*) mostly dirty white in colour, Whitebacked Vulture (*Gyps bengalensis*) with white on the back, the King Vulture (*Torgos calvus*) with scarlet head and neck; the kites notably the common Pariah Kite (*Milvus migrans*), the Brahminy Kite (*Haliastur indus*) body rusty red with head, neck and breast white, the Shikra (*Accipiter badius*) a slim ashy blue grey bird with rusty brown cross barred white below, eagles like Short-toed Eagle (*Circus gallicus*) thick set, with white under parts barred with brown and vertical bustle like feathers on face, and the commonest of our eagles, the Tawny Eagle (*Aquila rapax*) with flat head and thickly feathered legs; falcons like Redheaded Merlin (*Falco chicquera*) a bluish grey falcon with chestnut head and black barred white abdomen, owls like the Barn Owl (*Tyto alba*) with a facial disc surrounded by a ruff of stiff hairs, the Great Horned Owl (*Bubo bubo*) with 'ear tufts' or 'horns' and fully feathered legs, the Collared Scops Owl (*Otus bakkamoena*) a mottled grey brown, 'horned' owlet, under parts barred with blackish and brown, and the familiar Spotted Owlet (*Athene brama*) with spotted body, large round head and staring yellow eyes. Another common bird of the night is the Nightjar (*Caprimulgus asiaticus*).

Parrots found in the area include the large Indian Parakeet (*Psittacula eupatria*) with a maroon patch on the shoulder, the Roseringed Parakeet (*Psittacula krameri*) smaller and lacking the maroon patch, and the Blossom headed Parakeet (*Psittacula cyanocephala*), still smaller with bluish red head. The last is not so common as the other two.

Among cuckoos, the Koel (*Endynamys scolopacea*) and the Crow-Pheasant (*Centropus sinensis*) the familiar crow like bird with chestnut wings and long black tail are commonest. The Hawk-Cuckoo or Brainfever Bird (*Cuculus varius*) can be spotted by its screaming call rising in crescendo and ending abruptly, heard intermittently throughout the day.

Of the swifts, birds with bow like wings and noted for their speed, the Alpine Swift (*Apus melba*) is quite common. The Palm Swift (*Cypsiurus parvus*) associated with palmyra palm is found where these trees are present.

There is a rich variety, too many for individual mention, of small birds of the open plains, most of which are found in other similar drier areas of South India. These include, to mention the better known among them, kingfishers like Whitebreasted Kingfisher (*Halcyon smyrnensis*), Common Kingfisher (*Alcedo atthis*) and Pied Kingfisher (*Ceryle rudis*); Common Green Bea-eater (*Merops orientalis*); Roller or Blue Jay (*Coracias benghalensis*) the Common Hoopoe (*Upupa epops*); the Crimsonbreasted Barbet or Coppersmith (*Megalaima haemacephala*); woodpeckers like Goldenbacked Woodpecker (*Dinopium benghalense*) and the Yellowfronted Pied Woodpecker (*Dendrocopos mahrattensis*). Of the perching birds (*Passeriformes*) there are a great many variety: Indian Pitta (*Pitta brachyura*) a gaudy stub tailed green and fulvous bird with crimson undertail; larks like Black bellied Finch Lark (*Eremopterix grisea*), Rufoustailed Finch-Lark (*Ammodramus phoenicurus*), the Redwinged Bush Lark (*Mirafra erythroptera*), Small Indian Skylark (*Alauda gulgula*), Indian Pipit (*Anthus novaeseelandiae*) all rather resembling sparrow; swallows, like Wiretailed Swallow (*Hirundo smithii*) and the Redrumped Swallow (*Hirundo daurica*); Shrikes-birds with bills hooked at the tip like: Baybacked Shrike (*Lanius vittatus*), Rufousbacked Shrike (*Lanius schach*) and the Wood Shrike (*Tephrodornis pondicerianus*); the Golden Oriole (*Oriolus oriolus*) and Blackheaded Oriole (*Oriolus xanthornus*) bright golden yellow birds with some black on wings or on head; Drongos like Racket-tailed Drongo (*Dicrurus paradiseus*) and Black Drongo or King Crow (*Dicrurus adsimilis*); the ubiquitous House Crow (*Corvus splendens*) as also the Jungle Crow (*Corvus macrorhynchos*); the large Cuckoo-Shrike (*Coracina novaehollandiae*), Blackheaded Cuckoo-Shrike (*Coracina melanoptera*) and minivets like Small Minivet (*Pericrocotus cinnamomeus*) and Scarlet Minivet (*Pericrocotus flammeus*); the lora (*Aegithina tiphia*); three species of bulbuls, the white browed Bulbul (*Pycnonotus jocosus*) the Redvented Bulbul (*P. cafer*) and Red whiskered Bulbul (*Pycnonotus cafer*).

Of the family of Babblers, Flycatchers, Warblers etc., we have the Quaker Babbler (*Alcippe poioicephala*), the Spotted Babbler (*Pellorneum ruficeps*), Yellow eyed Babbler (*Dumetia hyperythra*), the Slatyheaded Scimitar Babbler (*Pomatorhinus schisticeps*), the Common Babbler (*Turdoides caudatus*) and the Jungle Babbler

(*T. striatus*). The common flycatchers are the Greyheaded Flycatcher (*Culicicapa ceylonensis*) and Blacknaped Blue Flycatcher (*Monarcha azurea*). Warblers found include the Streaked Fantail Warbler (*Cisticola juncidis*), the Ashy Wren-Warbler (*Prinia socialis*) and the Indian Wren-Warbler (*P. subflava*). The White throated Ground Thrush (*Zosterops citrina cyanotus*) is common. So is the Chestnutbellied Nuthatch (*Sitta castanea*). Of the Wagtails the resident species is the Large Pied Wagtail (*Motacilla maderaspatensis*). Tickell's Flowerpecker (*Dicaeum erythrorhynchos*) is occasionally seen. The Purple Sunbird (*Nectarinia asiatica*) and the Purplerumped Sunbird (*Nectarinia Zeylonica*) are the common sun birds. Nests of Common Weaver Bird (*Ploceus philippinus*) are a common sight.

In winter, this bird fauna is considerably enriched by the migrant species of birds from the north.

Reptiles:

Among the lizards, the commonly seen and better known forms are the Garden Lizard (*Calotes versicolor*), the Skink (*Mabuya carinata*). An interesting form which is named after the area, is the Agamid Lizard (*Sitana ponticeriana*) the only member of the family showing signs of degeneration of the limbs in that it has only four toes instead of the usual five. The Monitor Lizard (*Varanus monitor*) is occasionally met with.

The estuarine crocodile (*Crocodylus porosus*) and the fresh-water crocodile (*Crocodylus palustris*) used to be found, but have almost disappeared now.

Among sea turtles, the Hawksbill Turtle (*Eretmochelyx imbricata*) which yields the tortoise shell of commerce occur along the Pondicherry coast.

Many species of snakes may be found in the area. Among the poisonous species we have the Cobra (*Naja naja*), the common Krait (*Bungarus caeruleus*) and the Saw-scaled Viper (*Echis carinatus*). Non-poisonous snakes are more numerous of which the Wolf Snake (*Lycodon aulicus*) often mistaken for a Krait, the Green Whip Snake (*Ahaetulla namtus*), the Rat Snake (*Ptyas mucosus*) the Water Snakes or Keel backs (*Xenochrophis piscator* and *Amphiesma stoleta*) are rather common. The Dog-faced Water Snake (*Cerberus rhynchops*) is met with in estuaries and brackish waters. The Worm Snake (*Typhlops braminus*) is a harmless burrowing snake common in damp areas.

The common sea snakes of Pondicherry coast are the Beaked Sea Snake (*Enhydrina schistosa*) and the Banded Snake (*Hydrophis fasciatus*). Some other forms occasionally met with are (*Kerilia jerdoni*) known as Jerdon's Sea Snake and the Yellow Sea Snake (*Hydrophis spiralis*).

TABLE—II

List of reptiles met with in Karaikal, Mahe and Yanam

Common English name (1)	Karaikal (2)	Mahe (3)	Yanam (4)
Family—Cheloniidea			
Green turtle	<i>Chelonia mydas</i> (Linnaeus)	<i>C. mydas</i> (Linnaeus)	<i>C. mydas</i> (Linnaeus)
Family—Emydidae			
	<i>Geomyda trijuga</i> (Schweigger)		
Family—Gekkonidae			
House lizard	<i>Hemidactylus brooki</i> (Gray)	<i>H. brooki</i> (Gray)	<i>H. brooki</i> (Gray)
	<i>Hemidactylus triedus</i> (Daudin)		
	<i>Hemidactylus leschenaulti</i> (Dum & Bibr)		
Family—Agamidae			
Garden lizard or Blood sucker	<i>Calotes versicolor</i> (Daudin)	<i>C. versicolor</i> (Daudin)	<i>C. versicolor</i> (Daudin)
Skink	<i>Mabuya carinata</i> (Schneider)	<i>M. carinata</i> (Schneider)	<i>M. carinata</i> (Schneider)
	<i>Riopa punctata</i> (Gmelin)	<i>R. punctata</i> (Gmelin)	<i>R. punctata</i> (Gmelin)
		<i>Lygosoma dussumieri</i> (Dum. & Bibr.)	

(1)	(2)	(3)	(4)
Family—Varanidae			
Monitor lizard	<i>Varanus benghalensis</i> (Daudin)		
Family—Uropeltidae			
	<i>Plectrurus perroteti</i> (Dum. & Bibr.)	<i>P. perroteti</i> (Dum. & Bibr.)	
	<i>Uropeltis ceylanicus</i> (Cuvier)		
Family—Colubridae			
Olivaceous Keelback	<i>Atretium schistosum</i> (Daudin)		
Cat Snake	<i>Boiga trigonata</i> (Schneider)		
			<i>Enhydris enhydris</i> (Schneider)
Dog faced snake	<i>Cerberus rhynchops</i> (Schneider)	<i>C. rhynchops</i> (Schneider)	<i>C. rhynchops</i> (Schneider)
Wolf snake	<i>Lycodon aulicus</i> (Linnaeus)	<i>L. aulicus</i> (Linnaeus)	<i>L. aulicus</i> (Linnaeus)
Green Keel back	<i>Macropisthodon plumbicolor</i> (Cantor)		
Checkered Keel back	<i>Natrix psicator</i> (Schneider)	<i>Natrix psicator</i> (Schneider)	<i>Natrix psicator</i> (Schneider)
Striped Keel back	<i>Natrix stolata</i> (Linnaeus)	<i>Natrix stolata</i> (Linnaeus)	<i>Natrix stolata</i> (Linnaeus)
Rat Snake	<i>Ptyas mucosus</i> (Linnaeus)	<i>Ptyas mucosus</i> (Linnaeus)	<i>Ptyas mucosus</i> (Linnaeus)

(1)	(2)	(3)	(4)
Family—Elapidae			
Krait	<i>Bungarus caeruleus</i> (Schneider)	<i>B. caeruleus</i> (Schneider)	<i>B. caeruleus</i> (Schneider)
Cobra	<i>Naja naja</i> (Linn.)	<i>Naja naja</i> (Linn.)	<i>Naja naja</i> (Linn.)

Family—Hydrophiidae

Beaked Sea Snake	<i>Enhydrina schistosa</i> (Daudin)	<i>E. schistosa</i> (Daudin)	<i>E. schistosa</i> (Daudin)
Yellow Sea Snake	<i>Hydrophis spiralis</i> (Shaw)		
	<i>Lapemis curtus</i> (Shaw)		
Small headed Sea Snake	<i>Microcephalophis gracilis</i> (Shaw)		
	<i>Kerilia jerdoni</i> (Gray)		

The commonest House Gecko *Hemidactylus brooki* (Gray,) is found also quite as often away from buildings. The *Calotes versicolor* (Daudin) is commonly known as blood sucker. The *Varanus benghalensis* (Daudin) is commonly known as Monitor Lizard. It is beneficial to the people as it takes rats. *Enhydris enhydris* (Schn.) and *Natrix psicator* are aquatic snakes where they live upon fishes. The *Ptyas mucosus* (Linn.) is commonly known as "Rat Snake". It is mainly inhabitant of the plains and often found in the vicinity of human habitations. They take mainly rats and frogs. Within the poisonous snakes *Bungarus caeruleus* (Schn.) common "Indian Krait" and *Naja naja* (Linn.) "Indian Cobra" are terrestrial inhabitants and the *Enhydrina schistosa* (Daudin) is the common sea snake.

The occurrence of the estuarine crocodile, *Crocodylus porosus* though common once now needs confirmation. However, the marsh crocodile, *C. palustris*, may be spotted in marshy areas. Amongst lizards, the garden lizard *Calotes versicolor* and the skii (*Mabuya carinata*) are common.

In respect of land snakes, mention should be made of the blind snake (Typhlops), the python (*Python molurus*), the so-called double headed snake (*Eryx conicus*), the rat snake *Ptyas mucosus*, the wolf snake (*Lycodon aulicus*), the cat snake (*Boiga trigonata*) etc.

The water snakes are the chequered keel back and striped keel back. All the four dangerous killers like the Cobra, Russel's viper, Banded krait and the small Indian viper are also met with in fair number.

Amongst sea snakes, the common species are the beaked sea snake (*Enhydrina* sp.) *Hydrophis cyanocinctus*, and the small headed sea snake (*Microcephalophis gracilis*).

The sea turtles of the area are the edible green turtle (*Chelonia mydas*), the Logger head (*Caretta caretta*) and lastly the valuable "Tortoise shell" turtle (*Eretmochelyx imbricata*.)

Amphibians :

Among the amphibians the commonest of the frogs are the Indian Pond Frog (*Rana cyanophlyctis*), the Paddy-field Frog (*Rana limnocharis*) and the two edible frogs, the Green Frog (*Rana hexadactyla*) and the Indian Bull Frog (*Rana tigrina*). The Indian Toad (*Bufo melanostictus*) is very common. Two narrow mouthed frogs Microphyla and Uperodon are commonly met with under stones. The tree frog (*Rhacophorus*) is sometimes found on trees and bushes.

TABLE—III

The following amphibian species are likely to be found in Karaikal and Mahe:

Common Indian names	Species names
Family—Ranidae	
Genus— <i>Rana</i> Linnaeus	
Skiping Frog	<i>Rana. cyanophlyctis</i> (Schneider)
South Indian Frog	<i>Rana hexadactyla</i> (Lesson)
Paddy-field Frog	<i>Rana limnocharis limnocharis</i> (Wiegmann)
Bull Frog	<i>Rana tigrina tigrina</i> (Daudin)

Family—*Bufonidae*
Genus—*Bufo* Laurenti

Common Indian Toad *Bufo melanostictus* (Schneider)

The following amphibian species are likely to be found in Yanam :

Family—*Ranidae*
Genus—*Rana* Linnaeus

Skipper Frog *Rana cyanophlyctis* (Schneider)
Paddy-field Frog *Rana limnocharis limnocharis* (Wiegmann)
Bull Frog *Rana tigrina tigrina* (Daudin)

Family—*Bufonidae*
Genus—*Bufo* Laurenti

Common Indian Toad *Bufo melanostictus* (Schneider)

The water-frog community met with in this area include the skittering pond frog (*Rana cyanophlyctis*), the Paddy-field Frog (*Rana limnocharis*) and the Indian Bull frog (*Rana tigrina*) and the Green frog (*Rana hexadactyla*). However, the bull frog is scarcely seen because of its secretive habits. The toad commonly met with is *Bufo melanostictus*.

Fishes:

The territory has a rich variety of fish fauna in the coastal waters (Bay of Bengal) and also in the numerous ponds, tanks and water courses. About 175 species of fishes are known from Pondicherry. A new species of eel *Bascanichthys deranivagalai* (Menon) is known from the area.

Sharks such as *Carcharias sorrah*, *Scoliodon sorrakowah*, popularly known in Tamil as the "Sura meen" are common in these waters. The Electric Ray (*Narcine timlei*) is also known to occur here. The famous Hilsa (*Hilsa ilisha*) occurs sporadically. Though the Oil Sardine is not found in plenty as on the West Coast, a species of sardine related to the former (*Sardinella fimbriata*) is caught from the sea adjoining these areas. The White Bait (*Anchoviella commersonii*), the Dorab (*Chirocentrus dorab*), the Milk Fish (*Chanos chanos*) are some of the clupeid and clupeid-like fishes found. The Bombay Duck (*Harpodon nehereus*) found plenty in the Arabian Sea also occurs here though in limited numbers. Amongst the carps and catfishes, two species of "Kendai meen" are found: *Labeo kontius* and *Labeo boga*. The "Ponnaikeletee" (*Osteogobius militaris*, *Tachysurus jella*, *Mystus gulio* and *Pseudeutropius atherinoides*) are some of the other catfishes caught in considerable numbers.

The eel (*Anguilla benghalensis*) and a species of Muraenid eel are found. The Half-beak (*Hyporhamphus gaimardi*) and Gar-fish *Xenentodon cancila* are also common. Mulletts of the species *Mugil tade*, *Mugil parsia* and *Mugil cephalus* are of commercial value. The popular Mangoe fish (*Polynemus indicus*) yields an isinglass and is of value. Murrels of the species *Channa gachua*, *Channa punctata* and *Channa striata* are eaten in large numbers by the poorer section of the community. Carangid fishes (*Caranx melanpygus*, *Caranx carangus*) and Sciaenida such as *Otolithes ruber*, *Pseudosciaena coibor*, *Sciaena dussumieri* are also not uncommon. The Chichlid fish, Pearlsport (*Etroplus suratensis*) is also found here. Ribbon fishes (*Trichiurus savala*) of commercial importance occur here. Common fishes such as the goby, soles etc., are many. The fish fauna is rich and varied and with proper judicious management could be profitably exploited (See Appendix I on page 98).

Marine invertebrate fauna:

There are four major groups of marine invertebrate fauna commonly met with in the sandy beaches along the coastal line of the Bay of Bengal.

Polychaeta : As far as the polychaeta are concerned 26 species belonging to 14 families occur commonly in this area. In the family Aphroditidae five species viz., *Aphrodita aculeata*, *Gayana deludens*, *Harmothue dictyophora*, *H. sinagawensis* and *Euthalensessa djiboutiensis* are easily available forms. Out of these *Gayana deludens* have a wide range of distribution along the east coast of India. Among the family Syllidae, *Syllis exilis*, *Trypanosyllis Zebra* and *T. misakiensis* are commonly met with. Next comes the family Glyceridae wherein three species viz., *Glycera sagittariae*, *G. rouxii*, *G. cirrata* may also be found occasionally. Family Nereidae having three species i.e. *Nereis chilkaensis*, *Platynereis dibranchis* and *Perinereis maindroni*, of which the last one is known only from this area. Among the other species the following are to be mentioned:

Hesione pantherina (family Hesionidae), *Nephtys dibranchis* (family Nepthyidae), *Diopatra neapolitana* and *Arabella irricolor* (family Eunicidae), *Scoloplos marsupialis* (family Ariciidae), *Serpula vermicularis* and *Salmacina Dysteri* (family Serpulidae), *Stylarioides benghalensis* (family Chloraemidae), *Sternaspis scutata* (family Sternaspididae), *Schistocomus hiltoni* (family Ampharetidae), *Nicolea gracilibranchis* (family Terebellidae) and *Cossura delta* (family Cirratulidae).

TABLE—IV

General Non-Chordata

Polychaeta (Bristle worms)

Galtiana dewdens Fauvel
Perinereis maindroni Fauvel.
Marphysa mossambica Peters.
Ancistrosyllis rigida Fauvel.
Syllis (*Typosyllis*) *exilis* Gravier.
Platynereis dumerilii (Aud. and Edwards).
Marphysa sanguinea Montagu.
Pisionidens indica (Aiyar and Alikunhi).
Pisione complexa Alikunhi.
Diopatra neapolitana Dellechiaje.

Sipuncula (Peanut worms)

Sipunculus nudus Linnaeus.

Crustacea: Class crustacea is a diversified group having peculiar habit and habitat. Of the order Cirripedia 14 species are commonly met with. They are sessile form and attached to different kinds of sustratum. These are as follows :

Lepas anatifera indica, *Trilasmis minuta*, *T. amygdalum*, *Octolasmis tridens* *O. warwickii*, *O. gravii*, *O. lowei*, *O. cor*, *O. angulata*, *Balanus longinostrum* *Krusadiensis*, *B. amphitrite communis*, *B. tintinnabulum tintinnabulum*. *B. Sinuensis* and *B. hoekianus*.

Among the order Isopoda and Stomatopoda not many species are known from this locality. Mention can be made of *Ligia* (order Isopoda), *Squilla* and *Lysiosquilla* (order Stomatopoda).

Order Decapoda is an important group from the commercial point of view. More than sixty species of crabs and prawns are known to occur in Pondicherry. In the sub-order (*Macrura* *Penaeus indicus*, *P. monodon*, *P. semisulcatus*, *Metapenaeus monoceros*, *M. dobsoni*, *M. brevicornis* and in the sub-order *Brachyura* *Scylla serrata*, *Portunus pelagicus*, *P. sanguinolentus* are most important species supporting commercial fishery of the area.

Other forms of this order *Emerita*, *Albunea*, *Clibanarius*, *Diogenes*, *Coenobita*, *Polionex*, *Pachycheles*, *Porcellana*, *Matuta*, *Calappa*, *Dorippe* are known from this area.

Mollusca : In the class Gastropoda all the orders have their representatives in this area. *Haliotis*, *Patella*, *Nerita* and *Neretina* of the order Achatogastropoda, *Littorina*, *Turritella* *Planaxis*, *Cerithidea*, *Natica*, *Cyprea*, *Gyrineum*, *Cymatium*, *Bursa*, *Tona* of the order Magagastropoda, *Murex*, *Druba*, *Thais*, *Babylonia*, *Nassa*, *Olivia*, *Ancilla*, *Xancus* of the order Stenoglossa, *Hydetina*, *Bulla*, *Aplysia* of the order Pleurocoela are the common forms available in the intertidal area. *Onchidium* (order Stylommatophora) and some other genera of the above named order might be occasionally found in this area.

Among the class Pelecypoda *Arca*, *Modiolus*, *Pecten*, *Ostrea* and *Crassostrea* of the order Taxodonta and *Lucinia*, *Cardium*, *Meretrix*, *Venus*, *Paphia*, *Donax* and *Pholas* of the order Eulamellibranchiata are common inhabitants of this area.

Class Cephalopoda is represented by only *Sepia*, *Loligo* and *Octopus*.

TABLE—V

Mollusca

FAMILY

—Patellidae	<i>Cellana radiata</i> Born
—Trochidae	<i>Trochus radiatus</i> Gmelin. <i>Umbonium vestiarium</i> Linnaeus.
—Turritellidae	<i>Turritella attenuata</i> Reye. <i>Turritella duplicata</i> Linnaeus.
—Architectonidae	<i>Architectonica perspectiva</i> Linnaeus.
—Potamididae	<i>Telescopium telescopium</i> Linnaeus.
—Calyptraeidae	<i>Crucibulum extintorum</i> Lamarck.
—Naticidae	<i>Polynices mamilla</i> Linnaeus. <i>Natica tigrina</i> Roding.
—Muricidae	<i>Murex tribulus</i> Linnaeus.
—Nassariidae	<i>Bullia (Dorsanum) vittata</i> Linnaeus.
—Olividae	<i>Oliva ispidula</i> Linnaeus.
—Arcidae	<i>Anadara granosa</i> Linnaeus. <i>Arca inaequivalvis</i> Bruguiere.
—Mytilidae	<i>Mytilus viridis</i> .
—Pteriidae	<i>Pinctada vulgaris</i> Sohumacher.
—Pectinidae	<i>Pecten tranquebarius</i> Gmelin.

—Cardiidae	<i>Cardium asiaticum</i> Bruguiere.
—Veneridae	<i>Meretrix casta</i> Chemnitz. <i>Paphia textile</i> Gmelin. <i>Dosinia modesta</i> Sowerby. <i>Sunetta scripta</i> Linnaeus.
—Mactridae	<i>Mactra attenuata</i> Deshayes. <i>Macrinula plicataria</i> Linnaeus. <i>Mactra mera</i> Reeve.
—Donacidae	<i>Donax scortum</i> Linnaeus.
—Tellinidae	<i>Tellina angulata</i> Gmelin.
—Pholadidae	<i>Pholas (Monothyra) orientalis</i> Gmelin.

Echinodermata : Most of the species belonging to this group are from the intertidal and shallow water zone. When the hightide recedes Sea Stars, Sea Urchins, Sand Dollars and Brittle Stars are found lying on the sandy seashore.

Asteroidea are readily identified by their shape like that of star hence the name Sea Star. Among the Sea Stars common forms are *Astropecten indicus*, *A. monacanthus* and *A. polyacanthus*, *Luidia maculata*, *Goinodiscus farficularis*, *Asterodiscus elegans* and some species of protoreaster.

Echinoidea are commonly known as Sea Urchins, Heart Urchins and Sand Dollars. As ubiquitous and conspicuous inhabitants of the sea, the echinoids easily attract the attention of the shore visitor. Not many species are known from this place. Among them *Salmacis bicolor* and *Temnopleurus toreumaticus* (family-Temnopleuridae) *Clypeaster humilis* (family-Clypeasteridae), *Echinometra mathaei* (family-Echino metridae) are common.

Ophiuroidea are commonly known as Serpent Stars due to snake like appearance of the arms or as Brittle Stars from the tendency of the arms to break easily. Usually available forms are *Ophiogymna lineata*, *Ophioenemis inarmorata*, *Ophiothrix accedens* and *O. variegata*. They all belong to the family *Ophiotrichidae*. The family *Ophiocomidae* includes the forms *Ophiocomella* and *Ophionereis* may also be found occasionally.

Holothuroidea are usually known as Sea Cucumbers. This group is commercially important for its use in Trepang industry. The forms usually exploited for this purpose, available in this area are *Holothuria atra*, *H. scabra*, *H. eduris*, *Stichopus variegatus* and *Actinopyga echinites*. Besides these *Acaudina australis* and *Chondrocloeia recta* are also present in this area.

Crinoids are commonly known as Sea Lily and Feather Star. This group shows its marked absence in this area. Rarely some washed ashore forms such as *Lampometra* and *Comatella* are found.

APPENDIX—I

1. Species of fresh water fish recorded from Pondicherry and Karaikal:

Family — Cyprinidae	..	<i>Chela chupeoides</i> (Bloch)
		<i>Chela laubuca</i> (Hamilton)
		<i>Esomus barbatus</i> (Jerdon)
		<i>Rasbora daniconius</i> (Hamilton)
		<i>Labeo calbasu</i> (Hamilton)
		<i>Labeo boga</i> (Hamilton)
		<i>Labeo kontius</i> (Jerdon)
		<i>Puntius chola</i> (Hamilton)
		<i>Puntius dorsalis</i> (Jerdon)
		<i>Puntius filamentosus</i> (Cuv. & Val.)
		<i>Puntius sarana</i> (Hamilton)
		<i>Puntius</i> (Sarana) <i>pinnauratus</i> (Day)
		<i>Puntius sophore</i> (Hamilton)
		<i>Tachysurus jella</i> (Day)
Bagridae		<i>Mystus gulio</i> (Hamilton)
		<i>Mystus vittatus</i> (Bloch)
Schilbeidae	..	<i>Pseudeutropius atherinoides</i> (Bloch)
Belonidae	..	<i>Xenentodon cancila</i> (Hamilton)
Cyprinodontidae	..	<i>Aplocheilus panchax</i> (Hamilton)
		<i>Oryzias melastigma</i> (McClelland)
Channidae	..	<i>Channa gachua</i> (Hamilton)
		<i>Channa leucopunctata</i> (Sykes)
		<i>Channa punctata</i> (Bloch)
		<i>Channa striata</i> (Bloch)
Ambassidae	..	<i>Ambassis ranga</i> (Hamilton)
Anabantidae	..	<i>Anabas testudineus</i> (Bloch)
Gobiidae	..	<i>Glossogobius giuris</i> (Hamilton)

2. List of marine fishes met with in the Territory.

Family—Orectolobidae ..	<i>Chiloscyllium griseum</i> (Muller and Henle)
Carcharhinidae ..	<i>Carcharhinus sorrah</i> (M. & H.) <i>Galeocerdo cuvieri</i> (Le Sueur)
Rhinobatidae ..	<i>Rhinobatos granulatus</i> (Cuvier)
Trygonidae ..	<i>Dasyatis</i> (<i>Himantura</i>) <i>uarnak</i> (Forsk.) .. <i>Dasyatis</i> (<i>Amphotistius</i>) <i>zugei</i> (M.&H.) <i>Gymnura</i> (<i>Gymnura</i>) <i>micrura</i> (Schneider) <i>Gymnura</i> (<i>Gymnura</i>) <i>poecilura</i> (Shaw)
Myliobatidae ..	<i>Aetobatus flagellum</i> (Bloch & Schneider)
Torpedinidae ..	<i>Narcine brunnea</i> (Annandale) <i>Narcine timlei</i> (Bl. & Schn.) <i>Narke dipterygia</i> (Bl. & Schn.)
Clupeidae ..	<i>Dussumieria acuta</i> (Cuvier & Valenciennes) <i>Sardinella fimbriata</i> (Cuvier & Valenciennes) <i>Sardinella melanura</i> (Cuv.) <i>Sardinella sindensis</i> (Day) <i>Sardinella sirm</i> (Walbaum) <i>Hilsa ilisha</i> (Hamilton) <i>Pellona ditchela</i> (Cuv. & Val.) <i>Anodontostoma chacunda</i> (Ham.)
Engraulidae ..	<i>Setipinna taty</i> (Cuv. & Val.) <i>Anchoviella indica</i> (Van Hasselt) <i>Thrissocles dussumieri</i> (Cuv. & Val.) <i>Thrissocles malabaricus</i> (Bloch) <i>Thrissocles mystax</i> (Bloch & Schneider) <i>Thrissocles purava</i> (Ham.) <i>Thrissocles setirostris</i> (Brousonet)
Chirocentridae ..	<i>Chirocentrus dorab</i> (Forsk.)
Chanidae ..	<i>Chanos chanos</i> (Forsk.)
Synodidae ..	<i>Saurida tumbil</i> (Bloch)

Ariidae	..	<i>Osteogeneiosus militaris</i> (Linnaeus) <i>Tachysurus jella</i> (Day)
Muraenidae	..	<i>Gymnothorax punctata</i> (Bl. Schn.)
Ophichthyidae	..	<i>Bascanichthys deraniyagalai</i> (Menon)
Hemirhamphida	..	<i>Hyporhamphus gaimardi</i> (Cuv. & Val.)
Sphyraenoidae	..	<i>Sphyraena jello</i> (Cuv. & Val.) <i>Sphyraena obtusata</i> (Cuv. & Val.)
Mugilidae	..	<i>Mugil parsia</i> (Ham.)
Polynemidae	..	<i>Polydactylus sextarius</i> (Bl. Schn.)
Sillaginidae	..	<i>Sillago sihama</i> (Forsk.)
Lactariidae	..	<i>Lactarius lactarius</i> (Bl. Schn.)
Rachycentridae		<i>Rachycentron canadus</i> (Linn.)
Carangidae		<i>Atropus atropus</i> (Bl. Schn.) <i>Caranx (caranx) carangus</i> (Bl. Schn.) <i>Megalaspis cordyla</i> (Linn.) <i>Chorinemus sancti-petri</i> (Cuv. & Val.) <i>Chorinemus lysan</i> (Forsk.) <i>Chorinemus tala</i> (Cuv. & Val.)
Lutjanidae	..	<i>Lutianus johnii</i> (Bloch)
Nemipteridae	..	<i>Nemipterus japonicus</i> (Bl.)
Leiognathidae	..	<i>Leiognathus fasciatus</i> (Lacep) <i>Leiognathus insidiator</i> (Bl.) <i>Leiognathus lineolatus</i> (Cuv. & Val.) <i>Leiognathus splendens</i> (Cuv.) <i>Gazza minuta</i> (Bl.)
Gerridae	..	<i>Gerres filamentosus</i> (Cuv.)
Sciaenidae	..	<i>Johnius maculatus</i> (Bl. & Schn.) <i>Otolithes argenteus</i> (Cuv. & Val.) <i>Pseudosciaena coibor</i> (Ham.) <i>Sciaena dussumieri</i> (Cuv. & Val.)
Kyphosidae	..	<i>Kyphosus cinerascens</i> (Forsk.)

Ephippidae	..	<i>Ephippus orbis</i> (Bl.)
Drepanidae	..	<i>Drepane punctata</i> (Linn.)
Siganidae	..	<i>Siganus oramin</i> (Bl. & Schn.)
Trichiuridae	..	<i>Trichiurus savala</i> (Cuv.)
Scombridae	..	<i>Rastelliger kanagurta</i> (Cuv.)
Stromateidae	..	<i>Pampus chinensis</i> (Euphrason)
Gobiidae	..	<i>Glossogobius giuris</i> (Ham.) <i>Boleophthalmus boddarti</i> (Pallas)
Platycephalidae	..	<i>Platycephalus indicus</i> (Linn.) <i>Platycephalus scaber</i> (Linn.)
Bothidae	..	<i>Pseudorhombus triocellatus</i> (Bl. & Schn.)
Cynoglossidae	..	<i>Cynoglossus lingua</i> (Ham.) <i>Cynoglossus macrolepidotus</i> (Blkr.)
Echeneidae	..	<i>Echeneis naucrates</i> (Linn.)
Tricanthidae	..	<i>Tricanthus indicus</i> (Regan)
Tetraodontidae	..	<i>Arthrin stellatus</i> (Bl. & Schn.) <i>Chelonodon fluviatilis</i> (Ham.) <i>Castrophysus lunaris</i> (Bl. & Schn.) <i>Lagocephalus inermis</i> (Temm. & Schleg.) <i>Troquigener oblongus</i> (Bl.)

APPENDIX—II

Insects

Diptera

Family	Name of species	Locality
Bombylidae	<i>Bombylins albosparsus</i> Big	Pondicherry
Culicidae	<i>Anopheles tessellatus</i> Theo	Pondicherry
	<i>A. Vagus</i> Dönitz.	"
Conopidae	<i>Psysocephala calopus</i> Big	Pondicherry

<i>Family</i>	<i>Name of species</i>	<i>Locality</i>
Asilidae	<i>Asilus Asilus nigrimystaceus</i> Macq.	Pondicherry
	<i>Asilus Asilus trifarius</i> Macq.	"
	<i>Bactria maculatus</i> Fabr.	"
Calliphoridae	<i>Himipyrellia pulchra</i> Wd.	"
Muscidae	<i>Musca domestica</i> .	"

Orthoptera

Acrididae	<i>Aiolopus offinis</i> Boliver.
	<i>Onya velon</i> Fabr.
Blattidae	<i>Therea petiveriana</i> Linn.

Isoptera

There is no record in literature of any termites from Karaikal, Mahe and Yanam in particular. However the first record of any termite from India was from Tarangambadi, which is very close to Karaikal and it is very likely that the following species also occur in those areas:

Anacanthotermes viarum König.
Macrotermes convulsionarius König.
Odontotermes redemanni Wasman.

APPENDIX—III

Paleozoology

(Animal Fossils)

Family—Trochleidae :	<i>Calliostoma dyscritum</i> Cossm.
	<i>Calliostoma inaequiliratum</i> Cossm.
Family—Rissoidae	<i>Rissoina bonneti</i> Cossm.
Family—Turritellidae :	<i>Turritella tjadjariensis</i> Mart.
	<i>Turritella encosmeta</i> Cossm.
	<i>Turritella endeli</i> Cossm.
	<i>Turritella trifunis</i> Cossm.

- Family-Mathildidae : *Mathildia bonneti* Cossm.
- Family-Solariidae : *Solariella distinguenda* Cossm.
Solariella amblygoniata Cossm.
Solariella pachyozoder var. *bonneti*.
Solariella karikalensis Cossm.
Solariella pachyozoder Cossm.
Solarium karikalensis Cossm.
Solarium cf. *nitens*.
- Family-Vermetidae : *Vermetus javanus*.
- Family-Cerithiidae : *Cerithium (vertagus) bonneti* Cossm.
Cerithidea gibbulosa.
Cerithidea trifunata Cossm.
Rhinodavis bonneti Cossm.
Hemicerithium inopinatum.
- Family-Melanellidae : *Eulima grandis* Cossm.
Wiso marmorata.
- Family-Pyramidellidae : *Pyramidella balteata*.
Syrnola karikalensis.
- Family-Capulidae : *Capulus bonneti* Cossm.
- Family-Calyptraeidae : *Crepidula (siphopatella) subcentralis* Cossm.
Crepidula (siphopatella) cf. *Walshi*.
Crucibulum (Bicatillus) conulatum.
- Family-Xenophoridae : *Xenophora (Tugurium)*.
- Family-Strombidae : *Rimella margaritae* Cossm.
Rimella cancellata.
Strombus cf. *variabilis*.

- Family--Naticidae : *Stigmaulax aratum* Cossm.
Sigaretus bonneti Cossm.
Natica forskali.
Natica marochiensis var. *lurida*.
Natica (Ploynices) martini Cossm.
Natica (Momilla) cf. melanostoma.
Natica prosthenglossa Cossm.
Natica rhytidozodes Cossm.
Natica rosalina.
- Family--Cassididae : *Cassis (Cassaria) bonneti*.
Semicassis (Bezoardica) cf. glanca.
Semicassis (Bezoardica) strigata.
- Family--Cymatiidae : *Persona (Distortris) reticulata* Linn.
- Family--Bursidae : *Ranella bitubercularis* Lam.
Ranella margaritula Cossm.
- Family--Pirulidae : *Pyrula raticulata*.
- Family--Thaisidae : *Cymia sacellum* (Chemn).
- Family--Muricidae : *Murex bonneti* Cossm.
Murex (Muricopsis) diarti.
Murex (Muricidea) infratulus Cossm.
Typhis (Typhinellus) tetragoniatus Cossm.
- Family--Columbellidae : *Anachis crassicastrata* Cossm.
Atia simplex Mart.
- Family--Buccinidae : *Hindsia mekranica* Vred.
Latrunculus canaliculatus.
Latrunculus (Eburna) spiratus Linn.
Latrunculus (Eburna) oclusus Cossm.
Siphonalia (Perrion) heptozodes Cossm.
Phos macrostoma Cossm.
Tritonidea (Cantharus) tranquebarica (Martini).
Latrunculus (Peridipsacus).

- Family-Galeodidae : *Melongena (Pungilina) octocostata* Cossm.
- Family-Nassariidae : *Nassa (Hinia) karikalensis* Cossm.
Nassa (Hinia) colpophora Cossm.
Nassa (Telasco) verbeeki Mart.
Nassa (Amycla) dimorpha Cossm.
Nassa ovum Cossm.
Nassa (hebra) bonneti Cossm.
Nassa (Niotha) gemmulata.
Cyllene varians Cossm.
- Family-Fascioliidae : *Fusus perplexus* Adams.
Clavilithes inopinatus Cossm.
- Family-Olividae : *Oliva (Neocylindrus) mustelina* Lam.
Oliva (Neocylindrus) irisans Lam.
Olivancillaria gibbosa Born.
Olivancillaria (Agaronia) acuminata Lam.
Ancilla (Sparella) cinnamomea Lam.
Ancilla (Sparellina) candida Lam.
Ancilla (Alocospira) tornata Cossm.
Oliva cheribonensis.
- Family-Mitridae : *Mitra (cancilla) flammea* Quoy.
Mitra (cancilla) circulata Kien.
- Family-Turbinellidae : *Turbinella pirum* Linn.
- Family-Vasidae : *Tudicula spirillus* Linn.
Streptosiphon conderti.
Streptosiphon macrospira Cossm.
- Family-Cancellariidae : *Merica asperella* Lam.
Merica verbeeki Mart.
Trigonostoma crispatum Sow.
Trigonostoma bonneti Cossm.
Trigonostoma tjibaliungense Mart.

Family—Marginellidae : *Marginella* (*Eratoidea*) *bonneti* Cossm.
Marginella (*Eratoidea*) *karikalensis* Cossm.
Marginella (*Glabella*) *oligoptycha* Cossm.
Cryptospira (*Gibberula*) *tectiformis* Cossm.
Cryptospira (*Gibberula*) *cuneata* Cossm.
Cryptospira (*Gibberula*) *glandina* (Velain) Cossm.

Family—Conidae : *Conus* (*Leptoconus*) *cosmetulus* Cossm.
Conus (*Leptoconus*) *bonneti* Cossm.
Conus (*Leptoconus*) *anlacophorus* Cossm.
Conus (*Leptoconus*) *vimineus* Reeve.
Conus (*Lithoconus*) *malaivus* Hwass.
Conus (*Lithoconus*) *ngavianus* Mart.
Conus (*Lithoconus*) *literatus* Linn.
Conus (*Lithoconus*) *karikalensis* Cossm.
Conus (*Dendroconus*) *figulinus* Linn.
Conus (*Dendroconus*) *quercinus* Hwass.
Conus (*Chelyconus*) *subvimineus* Cossm.

Family—Terebridae : *Terebra* (*Myurella*) *mariesi* A. Smith.
Terebra (*Myurella*) *cancellata* Quoy.
Terebra (*Myurella*) *cumingi* Desh.
Terebra (*Myurella*) *cingulifera* Lam.
Terebra (*Myurella*) *karikalensis* Vred.
Terebra (*Duplicaria*) cf. *anomala* Gray.
Terebra (*Hastula*) *continuicosta* Cossm.

Family—Turridae : *Pleurotoma* cf. *crispa* Lam.
Pleurotoma (*Hemipleurotoma*) *bonneti* Cossm.
Pleurotoma (*Hemipleurotoma*) *cingulifera* Lam.
Clavatula (*Perrona*) *unisulcata* Cossm.
Surcula *javana* Linn.
Surcula *streptopleura* Cossm.

Surcula tuberculata Gray.
Drillia ferenuda Cossm.
Drillia bonneti Cossm.
Drillia (Brachytoma) karikalensis Cossm.
Drillia (Crassispira) sacra Reeve.
Drillia (Crassispira) sinensis Hinds.
Drillia (Crassispira) quadricarinata Cossm.
Drillia (Crassispira) adelomorpha Cossm.
Mangilia (Clathurella) costicrenata Cossm.
Mangilia (Clathurella) karikalensis Cossm.
Swecula (Turricula) lirocostata Cossm.
Daphnella (Raphitoma) mirocostriata Cossm.
Mangilia Houdasi Cossm.
Asthenotoma terebralis Cossm.
Raphitoma crenicostata Cossm.
Clathurella bicrenata Cossm.

Family-Actaeonidae : *Actaeon (Solidula) solidulus* Linn.
Actaeon (Solidula) cf. affinis A. Adams.
Actaeon (Solidula) bonneti Cossm.

Family-Ringiculidae : *Ringicula bonneti* Cossm.

Family-Atyidae : *Atys (Alicula) panaulax* Cossm.

Family-Dentalidae : *Dentalium proteiforma* Cossm.

VII. Climate

Pondicherry Region:

Situated well within the tropics near 12° N latitude on the east coast of India, Pondicherry experiences a hot and tropical maritime type of climate characterised by small daily range of temperature, humid weather and moderate rainfall. There is no clear demarcation of seasons. However, the summer may be taken to last from March to June followed by the period of the south-west monsoon which lasts upto September. The months of October and November constitute the main north-east monsoon season. There is no real cool weather season, but the period from December to February is relatively cool.

*Rainfall** : The average annual rainfall is of the order of 127 cm. Of this about 50 per cent is recorded during October — November and about 25 per cent during the south-west monsoon season. November is the rainiest month contributing about 30 per cent of the annual rainfall. (*Vide* table on pages 114-115). The range of variation of rainfall from year to year is quite large. The highest rainfall recorded was in 1943 which was as much as 204 per cent of the normal and the lowest was in 1952 when it was only 49 per cent of the normal. During the period 1911—60 the rainfall was between 80 per cent and 120 per cent for 20 years and above 120 per cent for 14 years. The rainfall was below 80 per cent for 16 years, of which there was one spell of four consecutive years (1947-50), and two spells of two consecutive years (1926-27 and 1952-53). Drought conditions, when the annual rainfall is less than 75 per cent of the normal, may be expected to prevail over the region once in four years on an average. The variability of annual rainfall is fairly large and that of seasonal rainfall still larger. The variations in rainfall from year to year are therefore significant.

In a year there are on an average, about 55 rainy days i.e., days with rainfall of 2.5 mm. or more.

*Temperature***: The period from about the end of February to mid-June is a period of continuous increase in temperature, when the mean daily temperature rises from about 25° C to 32° C. May and the early part of June constitute the hottest period of the year, with the mean daily maximum temperature at about 37°C and the mean daily minimum temperature at about 27°C. The summer days are oppressive due to high humidity. On individual days the maximum temperature may even reach 43°C. The sea-breeze, however, which sets in in the afternoons brings welcome relief. Occasional afternoon thunder-storms also give temporary relief. As the south-west monsoon current sweeps over the region, there is a slight and steady reduction in the temperatures. Mean maximum temperatures during the period of south-west monsoon remain more or less steady around 35°C and the mean minimum around 25°C. December and January form the coolest part of the year with the mean daily maximum temperature at about 28°C and the mean daily minimum temperature at about 21°C. On individual days the mean minimum temperature may be as low as 11°C during this period.

*Records of rainfall of Pondicherry available for 50 years from 1911 to 1960 are considered here.

**As there are no Meteorological observatories anywhere in the Territory, the study of temperature of all the four regions is based on the data of neighbouring areas experiencing similar climatic conditions.

Humidity : The relative humidity is generally high, being above 70 per cent during August to April. It is at its minimum value of 60 to 65 per cent in June and July.

Cloudiness : During June to November, the skies are usually heavily clouded. In each of these months more than 6/8 of the sky is covered by clouds for more than 15 days. Cloudiness usually decreases thereafter and the skies are usually clear or lightly clouded particularly in the mornings during February to April or May.

Surface winds : Winds are moderately strong throughout the year, except during the transition months of February–March before the summer season and during October before the onset of the north-east monsoon. During May to September, winds are mainly south-westerly in the mornings. In the afternoons they generally blow from south-east as sea-breeze giving relief from summer heat. With the development of the seasonal low over the south Bay of Bengal in October, winds take a northerly component; in November the north-easterlies are fully established which remain till January. From February a westerly component begins to predominate in the mornings, while in the afternoon, winds tend to revert to summer conditions i.e., are south-easterly in direction.

Special weather phenomena : During the north-east monsoon season, depressions and storms from the south Bay of Bengal move across or in the neighbourhood of the region, causing heavy rain and thunder-storms and gusty winds. Tidal waves flooding the low lying coastal areas accompany most of the storms. Thunder-storms generally occur from April to November, being comparatively more frequent in September and October (*Vide* table on page 116).

Karaikal Region :

Karaikal, situated on the east coast of India, near latitude 11° N in the deltaic region of the Kaveri, experiences tropical maritime type of climate with small daily range of temperature and moderate rainfall.

*Rainfall** : Karaikal has an annual average rainfall of about 126 cm., 68 per cent of which occurs during October to December. The amount of rainfall during the south-west monsoon period is small, being less than 20 per cent of the annual. November is the rainiest month, accounting for about a third of the annual total. The range of variation of annual rainfall is wide. During the period 1912–1960,

* Records of rainfall available for 48 years from 1912–1960 are considered.

the highest rainfall (recorded in 1930) was about 198 per cent of the normal, and the lowest one (recorded in 1949) was only 38 per cent of the normal (*Vide* table on pages 114-115). The rainfall was between 80 to 120 per cent of the normal during 20 years. The rainfall was below 80 per cent for 17 years and above 120 per cent for 12 years. There was one long spell of six years from 1947-52, one spell of three years from 1915-17 and one spell of two years 1933-34, when rainfall was less than 80 per cent of the normal. Variability of annual rainfall is fairly large, so that significant variations in rain fall from year to year may be expected. Drought conditions with the annual rainfall of less than 75 per cent of the normal may be expected once in three years on an average.

In a year there are on an average about 55 rainy days, i.e. days with rainfall of 2.5.mm. or more.

Temperature, humidity, cloudiness and surface winds : The level of temperatures in Karaikal is about the same as in Pondicherry. December and January are the coolest months with the maximum at about 28°C and the minimum at about 23°C. Minimum temperature as low as 16°C may sometimes be recorded. The diurnal ranges of temperature are generally small throughout the year, being highest (about 10°C) in May and June, and the least (about 5°C) during November to February.

The level of humidity and the pattern of cloudiness and surface winds are the same as in Pondicherry. Although slight variations in the monthwise occurrence of depressions and storms are noticeable, thunder-storms generally occur during April to November, particularly in April, September and October (*Vide* table on 116 page).

Mahe Region:

This region, situated on the west coast of India near latitude 12° N has a humid and tropical climate, with an oppressive hot season from March to May. The rainfall is plentiful during the south-west monsoon season. The monsoon normally sets in by the end of May or early June and withdraws in early November. There is no real cool weather season. December to February however, is a period of relatively dry and cool weather.

Rainfall :* The average annual rainfall is 353 cm. Most of this, about 80 per cent occurs during June to September and about 10 per cent during October-November. July is the rainiest month which alone accounts for about a third of the annual total rainfall (*Vide* table). The highest rainfall during the period

* Rainfall records of Mahe available for 41 years from 1912 to 1952 have been considered here.

1912-52 was recorded in 1947 which was 228 per cent of the annual normal. The lowest one was recorded in 1944 which was 46 per cent of the annual normal. The rainfall was more than 120 per cent for six years, between 80 per cent to 120 per cent for 25 years, and less than 80 per cent for 10 years. During the period under consideration there was one spell of three consecutive years (1917-1919) and two spells of two consecutive years each (1944-1945 and 1951-52) when the rainfall was less than 80 per cent of the normal. The variations in annual rainfall from year to year are not significant.

In a year there are about 120 rainy days, i.e., days with rainfall of 2.5 mm. or more.

Temperature: Days are coolest during the south-west monsoon months from June to September when the mean maximum temperature is about 29°C and the mean minimum about 24°C. From October, the day temperatures gradually increase till April when the mean maximum temperature reaches about 33°C and the mean minimum is about 26°C. April together with part of May constitutes the hottest period of the year, when on individual days the temperatures may go as high as 37°C. Night temperatures start decreasing gradually from November and reach their lowest during January, the mean minimum temperature being about 22°C. On individual days minimum temperature may fall as low as 16°C. After January, the night temperatures again start rising, till the advent of the monsoon about the end of May or early June when the minimum temperature reaches 26°C on the mean. In the hot season, the days are oppressive but the sea-breeze that sets in in the afternoons brings some relief. Afternoon thunder-storms in April and May always afford good relief.

Owing to maritime influence, diurnal range of temperature is small. It is at its maximum—about 10°C during December to February; during other months it ranges between 5-7°C.

Humidity: Humidity is very high throughout the year. Relative humidity is more than 70 per cent from April to November; during the remaining months also the relative humidity is over 60 per cent.

Cloudiness: During the south-west monsoon season the skies are generally heavily clouded to overcast, while during April and May and in the months of retreating monsoon viz. October and November, the skies are moderately clouded. For the rest of the year skies are clear or lightly clouded.

Surface winds: Generally moderate throughout the year, winds blow usually from west to north-west in the monsoon months. In other seasons, however winds blow from north-east to east in the mornings and from west to north-west in the evenings.

Special weather phenomena : Storms and depressions forming in the Arabian Sea during May affect the region and the neighbourhood causing temporary advance or early onset of the south-west monsoon. Some of the storms originating in the Bay of Bengal travel across the Peninsula in a weakened form and emerge out into the Arabian Sea and get revived there affecting this region. These storms and depressions occurring mainly during June to November cause the maintenance of the monsoon current over the region. In association with these systems, thunder-storms, heavy rain, and squalls are experienced, particularly during April to July and October to November (*Vide* table).

Yanam Region :

Situated within the tropics near 17°N latitude and in the deltaic region of the Gautami Godavari river, Yanam experiences a climate which is characterised by high humidity throughout the year, an oppressive summer season and good rainfall. March to May constitutes the summer season followed by the south-west monsoon season upto September. October and November form the retreating monsoon season. This period is also marked by the advance of the north-east monsoon over the region. December to February is the coolest part of the year.

*Rainfall** : Annual rainfall averages about 136 cm. The onset of the south-west monsoon takes place normally by the first week of June. Its withdrawal in September or October is followed by the advance of the north-east monsoon which withdraws by the end of November. About 55 per cent of the annual rainfall occurs during the south-west monsoon season (June to September) and approximately 35 per cent during the post monsoon months (October and November). October is the rainiest month accounting for over 23 per cent of the annual rainfall. The range of annual rainfall is fairly large. The highest rainfall during the 1912-53 period was recorded in 1916 and this was about 168 per cent of the annual normal; the lowest rainfall was recorded in 1946 when it was as low as about 50 per cent of the annual normal. During the 42 year period under consideration, the annual rainfall was over 120 per cent for 12 years, between 80 per cent and 120 per cent for 19 years, and below 80 per cent for 11 years. There was also one spell of three years (1945-47) and one spell of two years (1942-43) when the rainfall was less than 80 per cent of the normal. Variability of the annual rainfall is fairly large and variations in the annual rainfall from year to year can be significant.

During a year on an average, there are about 60 rainy days i.e. days with rainfall of 2.5 mm. or more.

*Rainfall records of Yanam available for 42 years from 1912 to 1953 are considered here.

Temperature : From February, temperatures start rising rapidly till May which is the hottest month with the mean maximum around 37°C and the mean minimum around 28°C. Humidity being high, the heat is very trying. The maximum temperature on some days in May or early June before the onset of the south-west monsoon may even touch 47°C. The sea breeze, however, affords some relief in the afternoons. Similarly pre-monsoon thunder-showers may also bring welcome relief on some days. With the onset of the monsoon in June the temperature falls rapidly and remains almost steady till September. In this season mean maximum temperature is around 32°C and the night temperatures fall rapidly till December or January when day temperatures are around 27°C and the night temperatures around 19°C. Sometimes the minimum temperature may reach as low as about 14°C. December and January are the coolest months.

Humidity : The air is generally humid throughout the year with relative humidity—over 70 per cent in the mornings and over 60 per cent in the evenings during all the months.

Cloudiness : The skies are generally heavily clouded to overcast during the south-west monsoon months. There is moderate cloudiness in the post-monsoon months. During the rest of the year, the skies are clear or lightly clouded.

Surface winds : In the summer season winds blow from directions between south-east to south-west. During the monsoon season, they blow mainly from south-west to west. During October to February, winds are usually from north-east in the mornings, veering towards south-east in the afternoons. Winds are generally light to moderate during the whole year.

Special weather phenomena : A few of the storms and depressions which form in the Bay of Bengal in the pre-monsoon month of May, and during September to November, cross the east coast, and affect the region and the neighbourhood, causing thunder-storms, heavy rain and strong winds. Tidal waves may sometimes be generated by storms. Occasional thunder-storms associated mainly with the onset of the south-west monsoon occur in April, May and June (*Vide table*).

TABLE

Normals and extremes of rainfall in millimetres

Region		Jan.	Feb.	March	April	May	June	July
Pondicherry	..	50.4	14.1	24.3	24.2	50.1	37.8	59.1
Karaikal	.. ..	78.5	17.2	25.0	24.7	39.1	31.1	43.3
Mahe	.. ..	3.0	10.2	12.3	57.1	201.0	954.5	1121.1
Yanam	.. ..	12.4	17.3	9.7	17.9	53.1	129.9	228.3

in Pondicherry, Karaikal, Mahe and Yanam.

Aug.	Sept.	Oct.	Nov.	Dec.	Annual	Highest annual rainfall as percentage of normal and year*	Lowest annual rainfall as percentage of normal and year*
108.8	120.4	262.4	369.1	152.1	1272.7	204 (1943)	49 (1952)
62.7	80.0	229.2	398.3	229.4	1258.5	198 (1930)	38 (1949)
565.5	222.0	243.1	111.8	25.7	13527.1	228 (1947)	46 (1944)
183.3	211.2	315.0	171.5	11.6	1361.2	168 (1916)	51 (1946)

* Years given in brackets.

TABLE 2

Monthwise occurrences of storms during the period 1891-1960

<i>Month</i>				<i>Pondicherry</i>	<i>Karaikal</i>	<i>Mahe</i>	<i>Yanam</i>
January	..	..	..	1	—	—	—
February	..	..	..	1	—	—	—
March	..	..	..	1	1	—	—
April	..	..	..	1	1	—	—
May	..	..	..	2	3	1	3
June	..	..	..	—	—	—	—
July	..	..	..	—	—	—	—
August	..	..	..	—	—	—	1
September	..	..	..	—	—	—	10
October	..	..	..	4	2	—	17
November	..	..	..	14	15	6	1
December	..	..	..	3	5	1	—
Total	27*	27*	8*	4**
							37*

* Originating in the Bay of Bengal.

** Originating in the Arabian Sea.

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CHAPTER--II

HISTORY

I. Prehistoric, proto-historic and archaeological periods

Pondicherry may be said to have had roughly four distinctive stages of its cultural past, namely, the Prehistoric, the Archaeological, the Historical and the Modern. In the widest ambits, these stages could be taken as having prevailed in the remote geological past, prior to the first half of the first millennium B.C.; in the second half of the first millennium; and from the Christian epoch downwards to the XV century A.D., and in the last four centuries till Independence. We are now concerned with only the first two stages.

The second stage is essentially taken up by the widely observed and recorded provenance of the funerary culture known as the 'Megalithic', in the Iron Age, when the entire South India and with it, Tamil Nadu and Pondicherry area, received their highest stage of material and temporal prosperity which became truly the base and the foundation, as it were for the building of the grand mansion of the regional culture, of which the third and fourth stages are the corporeal entities. The earliest and in a sense indeed the remotest and scarcely well recorded or well established stage is that of the dwindling hours of the primitive prehistoric stone age, when man emerged from the mere hunting stage and the oppressive thralldom of the environment and the inherent dangers, and turned out to be capable of exploiting the innate reflexes and limbs of his, towards controlling the ecological factors and ensuring for himself a steady supply of food in the first instance and the other elementary amenities that sedentary schedule that was the sequel, offered. This Late Stone Age terminal and beginning of the geological 'present' is represented by a heterogeneous microlithic culture and the emerging Neolithic culture traits like polished stone axes (or celts), advent of subsistence agriculture and advent of hand-made pottery and domestication of animals for farming and foraging for the first time.

The narrative below starts from the later to the earliest stage backwards into time. This has the advantage of appreciating the causative chain or link of each stage with the previous, proceeding from the known to the unknown, as is the archaeological method of enquiry.

The Era of Indo-Roman Trade :

The advent of the Mediterranean maritime entrepreneurs into the Indian Ocean catering to the Imperial needs of Rome was one of the most eventful stages in the cultural as well as the commercial map of Southern India. The unknown author of the maritime chronicle 'Periplus Maris Erythraci' had much information to give about the hazardous voyages in the open Arabian Sea and along the coastal marts, punctuating the indented peninsular coast all the way round from the mouth of Narmada to the mouth of the Ganga-Brahmaputra estuary. Baryagaza (modern Broach), Calleana (Kalyan), Muziris (Cranganore), Nelcynda, Colchoi, Khaberis emporium, Sopatma, Poduca, Maisolea, and so on form a long list of the busy centres of trade on the Indian Coast, which had much to offer by way of fancy, fashionable and prestigious goods such as silk, ivory, pepper and pearl. The Roman court life was eager to absorb all this and more, first as status-symbols, and additionally as the prologue to the carving out of colonies and enclaves beyond the land-locked Mediterranean in the fabulous Orient, for which the Roman gold issues were sufficient lure, on the *quid pro quo* basis. The prospect in the long range was of great promise and the adventure implicit in these perilous though exciting voyages, was an additional challenge to the Roman imagination. The result was that the sea-routes were repeatedly reconnoitered and the oceanic phenomenon carefully explored. Then, to their luck, Hippalus the Greek, discovered that the monsoon winds in the Indian Ocean have this peculiar knack of swinging the boats in the high seas, around the Indian-Sri Lanka peninsular tip, into the Coromandel Coast without any humming and having at the wheel or at the sail-ropes. Having thus obtained the means of cruising into the calm bay-waters of the east coast of South India, the frequency of their visits to these Tamil marts became a matter of smooth schedule. This roused, as only such periodic alien economic incursions into the shores could rouse, the cultural and commercial thinking, and local autonomous chieftains of the Chera tract, Pandyan kingdom, Cholaman-dalam and Oymanadu (the area of South Arcot District) were busy exploiting this impact to increase their status and gold standard, not to mention the cultural acclimatization and interchange of thought and heritage, that such a direct mixing-up afforded. The term 'yavana' which was just a literal equivalent of these alien Greeks (and Romans) became a bye-word for endearment for aesthetics, for extravagance and a key to the worlds beyond in the West.

The Romans, besides gold, were able to offer the choicest mediterranean wine, Italian preferred, brought in large corrugated amphora jars, with their elongated body, tapering peduncular bottom, tall narrow neck and two flattish strap handle loops on either side of the shoulder and neck. There had been considerable remains of these amphora jars noted at Poduca (Arikamedu) and other Roman marts of the east coast, which by their resinous residue at the bottom of the interior

give evidence of the wines they had held in those distant times. Such emporia or marts were generally divided by the Romans into 'noumenon emporion' (lawful market) and 'enthesmon emporion' (privileged market). The latter carried special legal provision for trading to be fixed or cancelled by the local chiefs of the mart area. The Tamil ports trading with the Romans had seemingly only such an arrangement and not a regular commercial port obligated to the Romans for trade. Permanent agencies of the Graeco-Roman traders might have been posted at these emporia, and their organization was perhaps the model for the Portuguese, Dutch, French and British factories of the much later date.

In a similar way, there was the clear distinction made in the 'Periplus' of the nature of trade in India, respectively the terminal trade and the transit trade. The former was the appearance at the coastal marts of the products of the sub-continent itself, while the later was only the relay of the goods produced from farther afield, as from Central Asia, or China, which were routed through the Indian ports. With Southern India, the traffic was essentially of the former kind and the spices, muslins, pearls and jewel-stones produced here involved thus the exchange of great quantity of gold and silver coins and it is implied by Periplus that 'in no year does India absorb less than 50 million Cesterces'. The economic factor involved in this bulk trade was no doubt the respect that Indian merchants and rulers had for the integrity of Roman coinage which became shaken only from the time of Nero's debasement of his silver currency in 63 A.D. Subsequently also, the trade continued or even increased, but the currency was 'cancelled' by an incision across the issues, and taken on its bullion value and not its status as a legal tender seemingly also to put coins such as these out of circulation, once these passed into Indian hands. The 'defaced' currency recovered from various 'hoards' and scattered occurrences in excavations now, cover a wide range of time from Nero and Vespasian to Hadrian and even Constantine. The largest number of hoards are accounted for from South India, especially Tamil Nadu and the Coimbatore region of that State. It is not surprising this is so, as the Coimbatore District virtually formed the tri-junction of the ancient Chera, Chola and Pandyan kingdoms, and much social, military, cultural and economical transactions and trends were confined to the area covering Coimbatore to Karur (anciently the Chera capital perhaps). This is one of the reasons why we do have many important marts on the east coast, as already listed earlier, including Arikamedu or Virampattinam, but very little or no gold coins were recovered from these eastern marts owing to the centrifugal trends operating towards the Coimbatore-Karur area, and the practical influx of circum-peninsular traffic around Kumari cape was only from about the second half of the first century A.D. Consistently with this, no coins earlier than Nero or Vespasian are recorded from Sri Lanka, and the story is the same for much of the Bay of Bengal marts of Tamil Nadu.

Arikamedu or the bristling coastal village of Virampattinam, south of Pondicherry, was first noticed for its relics of the opening centuries of the Christian era when a local French antiquary collected finds there in 1937, among which a gem (now lost) with an *intaglio* portrait of Augustus was a distinguished relic. Subsequent more business-like investigations by the French workers at Virampattinam and Arikamedu recovered some sherds which were only subsequently to be identified by Dr. Mortimer Wheeler, as the Italian red glazed 'Arretine' ware and amphorae forms, apart from Roman lamp fragment and a second *intaglio* in untrimmed gem, with cupid and bird motif in it. This necessitated firm and systematic investigations which were carried out by the Archaeological Survey of India under Dr. Mortimer Wheeler as its then Director General in 1945. The work was resumed by Mon. J.M. Casal, the well-known French archaeologist in 1947-48. This had, for the first time, produced a firm and widely applicable datum for the associated local culture. Among the important structural evidences recovered from Arikamedu excavations were a substantial brick structure, evidently a ware house, and another series of tanks or 'dyeing vats' apparently for carrying on a textile trade of some significance.

The site also produced a class of pottery known as the 'black and red ware' which is found generally associated in great bulk typically with the Iron Age megalithic burial monuments of South India and especially Tamil Nadu. More will be mentioned of these monuments in the succeeding pages. This pottery by its occurrence at Arikamedu along with the dated 'Arretine' and rouletted ware, tends to give, as it were a *terminus post quem* to its provenance in this area and in Tamil Nadu. This also helps in the reconstruction of the cultural history of this region which is remarkable for an awakening of classical Tamil literature and the blossoming of the Tamil ethos along with it resulting in the great kingdoms like those of the crowned heads, Chola and Pandya in the south and Pallavas in the north.

Thus, the excavations at Arikamedu near Pondicherry had several important consequences. It identified the 'Poduca' of the classical geographers of the West, and made the name of Pudukkottai more meaningful; established the site of the Indo-Roman trading station and the activities there, in terms of the link with the Mediterranean; gave a datum line for first century A.D. deposits in Tamil Nadu and all along the coastal parts of Andhra and Bengal, and even in land areas of Karnataka, etc., by the identification of the Arretine and Rouletted ware with their counterparts in the Roman areas of the Mediterranean; enabled archaeologists to distinguish the types of Roman antiquities which were found in the east coast Roman marts from those of the west coast where a pottery akin to the Roman 'Samian ware' was invariably associated with the period of Roman impact in the early historic cultures; by the

association of black and red ware that was found in the sites in the Roman levels, gave a posterior terminal date to this ware which is associated invariably elsewhere with megalithic Iron Age cultures in Tamil Nadu and the rest of South India.

The advent of wine, table-ware beyond local skill, lamps of a strange sort, glass and cut gems, with the traders from far off mediterranean was indeed a new stage in the leisurely life of the people till then. During the excavations, at the northern or seaward end of the site, at water level, was found a large simple brick structure more than 150 feet long which was obviously a ware-house. South of this were courtyards walled with brick and timber containing brick tanks and cisterns, drains, wells and soak-pits, the last made in the typical local fashion of superimposed tiers of terracotta rings. Beyond was a formidable revetment in brick with a batter and surviving to about 1.83 m. height which had been traced by the French archaeologist Casal to nearly 76.25 m. eastwards from its broken river end joint. This was probably a tank or reservoir but equally plausibly, might have been a defensive revetment. Thus, storage and industrial activity is evidenced by the above that could be connected to the 'Agaritic' dyed muslin, mentioned by Periplus as the export of the region.

It would seem that most of the brick structures were posterior to the stoppage of arrival of the arretine imported ware from Italy which would have been around c. 45 A.D. The supply of wine, however, continued unabated. The depth of deposits of nearly 4.83 m. containing amphorae jar fragments under the warehouse, seems to corroborate the fact that the age of the site could be beginning at least a century prior to the stoppage of arretine ware. But the main function and contacts of the site continued till about the close of the second century A.D.

A feature of the imported arretine pottery was that they carried four potters, stamps, namely, VIBIE, ITTA, CAMVRI and C. VIBI OF, mostly in the northern (warehouse) sector of the site. These were well-known potters and merchants of Arezzo and Rome in the first century A.D. Of equal importance is also the Roman glass, including a typical 'pillared' bowl of the first century A.D. type, and Roman lamps. Roman coins were completely absent, seemingly due to the reason mentioned already earlier that imported currency were immediately cancelled and converted into bullion, as no monetary exchange was to be envisaged.

The proto-historic period :

Later stage : It has already been mentioned that the advent of the foreign impacts on our coasts was mainly due to the opening up of maritime impulses everywhere in the world especially in the Graeco-Roman period of the second half of the first millennium B.C. It gained momentum seemingly from the time Alexander the Great ventured into the Indian soil for expanding his empire and met with a

foeman worthy of his steel in Porus in the Punjab. His Viceroy Selukes Niketar was again successfully stalled by the Mauryan chief Chandra Gupta who contracted a matrimonial alliance also in the bargain. It is said that among the prized objects of tribute paid to the former was included some choice specimens of Indian iron and steel weapons. The Asokan empire was seemingly able to expand upto the lower South India mainly by this metallurgical development. Thus, immediately, Indian enterprises in the 'black gold' namely, iron had been at its zenith, around this time. It is this advanced stage of the Iron Age that is the period that finds in Pondicherry and its environs in South Arcot District, the proliferation of the typical diagnostic trait of South Indian Iron Age, namely the 'megalithic' funerary tomb structures erected for and over the dead kinsmen by the indigenous communities of the area, and truly indeed in all parts of Tamil Nadu as well. It should be appropriate to outline, in a brief manner, the genesis and distribution of the megalithic types in this region. The culture which apparently sprung from the western seaboard around northern Karnataka area, as an integrated cultural impulse working into the iron using people (who had already become a viable group by the adoption of a typical ceramic namely, black and red ware, became alike the hall-mark of the advanced ethos of the community by the cult significance of the practice, as also the expression of the highly specialised skills of the artisans in iron metallurgy, both for attack and defence as for the application of these tools for quarrying, dressing, cutting and erecting the funerary burial tombs of the dead in that society. The *modus operandi* for the burial was that the dead body is exposed to nature and carrion birds and animals of a secluded clearance in the forest nearby, and after the flesh and skin had been fully removed and the bones have also been detached in the process, these bones and skull—or indeed such as survive the onslaught of preying animals—are collected and temporarily kept in an urn. After several members of the same clan or family have passed away, these secondary and fractional bones and skulls of multiple individuals are collected together and interred into terracotta legged coffins called *sarcophagi*, which are themselves placed inside a 'dolmen' chamber tomb. This tomb comprises multiple orthostats and a hood or cap-stone. Where perfect rock for quarrying and dressing is available, these are fixed in the form of a 'cist' or box like coffin chamber, partially sunk into the soil, which has four regular side slabs, a floor slab and a flattish cap-stone. The eastern side of the dolmen or cist, as the case may be, generally contains a rough gap or a regular port hole opening, closed by a door slab or block, in either case. Outside this orientation feature—which has a general association with the direction of the rising sun, but is likely also to be southwards in some regions—there is also invariably a causeway-like passage formed for a stretch, suggestive of a passage and portal of a dwelling house. The other end of this passage is generally the bounding circle of stones which most frequently delimits a cist or dolmen tomb, and is bearing a full heap of earth and rubble or

cairn which partially covers the cist monument making only the cap-stone visible over the heap of the tomb. In the case of the dolmen, however, the cairn heap bounded by the stone circle may cover up to the cap-stone or may keep the dolmen tomb chamber practically standing out in the landscape like a colony of huts. The interior of the tomb chamber contains, in the case of the dolmen, the burials only in sarcophagi, single or multiple, while in the case of the cist tomb, the bones etc., are laid right on the floor slab itself. The other grave furniture include weapons and objects of iron like lances, swords, daggers, arrow tips, axes or adzes (sometime with a ring fastener around it for hafting it on to a wooden handle, hoes, etc., stone objects like pestles, mortars, occasional neolithic celts and pounders and ring-stones brought into the tombs, out of the chronological context, and merely indicative of the presumable earlier neolithic cultural stage in the same region or in the neighbourhood, or as a legacy to this specific communities in whose tomb they are to be found; beads of terracotta, stone, gold and semi-precious stones like agate, chert, chalcedony or jasper, some of which occasionally are also liable to be of the 'etched' variety, pick out and filled up in Kaolin with a variety of designs suited to the shapes of the beads; shell and chank objects, occasional gold ornaments; a large variety of pots and pans, mainly of the black and red ware (which have the whole of the interior black including the outer rim, while the entire exterior is otherwise red or pale pink) but also comprising other types like all-black ware, and red wares of well-fired texture. The typical shapes are conical vessels which can be placed only on ring stands which, as a sequel, are also in plenty, tulip vases and knobbed handled lids, funnel shaped pots, bowls, dishes and pans of various sizes, apart from storage jars and three-legged pots. It is interesting to note that at least one type, namely the ring stand—and also in the analogous black ware type—is also noticeable in far off Egypt in the Nubian Valley (where now the Aswan High Dam stands) and datable there to the middle of the second millennium B.C. A variety of markings, mostly after firing, are engraved on some of the pots. These markings are single as well as multiple, and recent studies have brought out the feature that at least fifty of these 'graffiti' marks, as they are called and are found all over South India, in these black and red ware fabrics, are akin to the corresponding pictographic script forms of the Harappan (or Indus civilization) culture. All these, though not making any coherent reading, do indeed emphasise the albeit distant links that these separated regions must have had, at one time, the vestigial relics of which these 'graffiti' marks and ring stands constitute.

A type of tomb that invariably accompanies the cist or dolmen tomb in Tamil Nadu especially is the mere stone circle. This comprises a ring of stone blocks or slabs, well planted into the ground within which, inside a cairn heap, are to be found generally multiple burial urns which might contain inside bone fragments, pots and

iron objects and such other knick-knacks. These cluster around the dolmen or cist tombs and also preponderate in many of the sepulchral site, in gross numbers. It is not yet clear if they represent a diverse community grouping and if so, what its mode of erection was. These urns all appear, however, to have been interred in any given stone circle, at the same time. These burials, on the whole, however, are of an inferior order, with very little grave furniture and no outstanding buried features or articles for which reason, one might be tempted to guess that they might be poorer sections of the community buried with less of ostentation. All the same, the fact that no urn is generally found inside a cist or dolmen, suggests that they might yet be having a variation or diversity underlying them.

It is however, to be noted here that the statement above regarding urn not being found inside a cist or dolmen is to be qualified as holding good for most but not all regions. For instance, in Pondicherry region and in the adjacent South Arcot District, it is common to find sarcophagi, interred inside regular slab cist monuments with port-holes etc. The dolmen type which is more prevalent in Chengalpattu District does not generally fancy an urn inside this tomb, but has always only sarcophagi coffins. The regions of the Coimbatore and Salem Districts and partly Pudukkottai District, show the feature of urns being found inside a cist-tomb, whereas the classic and seemingly the progenitor region of the port-holed slab-cist tomb type, namely, Karnataka does not have, as already mentioned while describing a cist, any inner burial coffin or container and has the bones and grave goods placed directly on the floor. On a consideration of the fact that the urns which are found inside the tombs of Coimbatore, Salem and Pudukkottai are large sized pyriform urns with peduncular or pointed bottom, these are perhaps different from the comparatively smaller and thinner urn types to be found inside stone circle monument type: Such large sized urns are to be found in great numbers in the necropolises of Madurai, Ramanathapuram and Tirunelveli Districts. This would show that these districts which have only extensive urn fields for their burial places, in the pre-historic times, and do not have any 'megalithic' appendage around or upon the burials, might have, during their expansion or dissemination in the neighbouring region come into touch with the cist or the dolmen types and by impact and partial absorption, had produced hybrid types like cists with sarcophagi as in Pondicherry area or cists with urns, as at Pudukkottai, Salem, Coimbatore, etc.

With this background, we must examine the types found in Pondicherry area. These are of two main kinds, namely, urn-burial sites like Muttirapalaiyam and slab cist types with port-hole, roof slabs, stone circle etc., as in the case of Suttukanni. These two sites were excavated by the French archaeologist (Casal) in the fifties of this century and the excavated relics along with some Arikamedu Indo-Roman excavated data are to be found in the Pondicherry Museum at No. 1, Rue Romain Rolland.

The site at Muttirapalaiyam produced a large number of such urns. They were invariably without any external megalithic or stone built features, not even a stone circle, and are generally of more than medium size, in the urn-forms. They had rich burial pottery but comparatively poor articles of other kinds. A feature of interest among the black and red ware pottery of this site, is the flat based ware which are generally found only rarely in other sites of the black and red ware, but is also to be seen here, in the Arikamedu site, alongside the Roman levels, of around the first century A.D. date and later. This would indicate a new impact on the pottery forms of the region, caused by the foreign trading enterprises, by which flat based bowls, which are not of the Indian ilk generally, were also being manufactured. They are doubtless suggestive of the very fading out of the black and red ware use itself and with it the advent of new and changing patterns of life and industries in Tamil Nadu and Pondicherry, as elsewhere. They cease to belong to the proto-historic level and were standing some way on the early historic threshold.



inferred that the grave either contained a pit circle type originally, within which the jewellery was interred and later on the cist tombs came to be erected in it, or more plausibly prior to the erection of the cist tomb, soon after the ground level of the pit had been prepared, the *cache* for some unknown reason had been buried, so as to be free perhaps from grave robbing. The fact that the sarcophagus and the capstones were undisturbed, as seen by the excavators, would show that the original purpose of the erection of the cist in secreting the *cache* below the floor, had been fully served. The entry of sarcophagus into a cist is found only in Pondicherry region and the adjacent South Arcot District, whereas the corresponding feature as at Coimbatore and Pudukkottai was the entry of an urn into a cist as noted already. The pottery from the megaliths generally are different from those of the black and red ware producing layers of the site at Arikamedu, and by that very token, the black and red ware types known from megaliths elsewhere in the adjacent districts of Tamil Nadu.

Early Stage : The proto-historic period had an earlier phase everywhere in India, when the end of the Stone Age barbarism gave place to food-producing pastoral communities who produced hand made pottery and had domesticated certain farm animals, and were using for their tool equipment chipped, pecked and polished stone axes, adzes and the like, generally fabricated out of dolerite or basalt. The raw material is largely available in the form of veins running into the Cuddapah series. But where such material is not available and had to be brought from afar, it is evident that there would either be no chance of these tools having been made or no context for its borrowal from others who have access to it. In Tamil Nadu, these sources are identified in North Arcot and Salem Districts especially, and in the western part of Madurai in a small measure. Thus this 'Neolithic' stage of human development, in so far as its tool facies are concerned, are to be confined to these districts, as exemplified at Paiyampalli in the first mentioned, several sites in the hills of the Salem District, and in T. Kallupatti of the last mentioned. It is likely that certain western hilly parts of the South Arcot District might have had the chance of borrowing these tool making impulses from their knowledgeable neighbours. But certainly, the eastern seaboard of this district and neighbouring Thanjavur District had no chance of acquiring this trait. It could also be that the ecological compulsions of the littoral might have caused the continuance of the Later Stone microlithic industries. In this connection, it is pertinent to note that all along the eastern coast, oscillations of the sea-level in the remote past have been surveyed and identified, in the main, and found indicated by the 40ft; 20ft, and 10ft. benches above sea-level, by the U.N. Ground Water Project Programme of the Kaveri basin also, in recent times. It would seem that these three former sea-level horizons, which have now become raised, represented from a cultural point of view variously the Later Stone Age; the Later phase of the proto-historic (as affiliated to the Iron Age and black and red ware described earlier) and ending with the early

Indo-Roman Settlements along the coast in the early historic time; and finally the historical dynasties like Pallavas as at Mamallapuram, etc. Chronologically they are relatable, on the basis of archaeological evidence now, with the Teri sand dune microlithic sites of Tirunelveli and Ramanathapuram Districts datable to 10000 B.C.-4000 B.C.; with the excavated sites of wharf, etc., in Kaverippattinam (Pumpuhar) on the mouth of Kaveri datable to c. 250 B.C.-100 A.D.-Arikamedu, Nattamedu etc.; and the last 10 ft. level to the port cities of the Pallavas, as around the VI-VII century A.D. It is seen also that, after the 'Iron Age, to Roman stage, the sea-level dropped appreciably and this might indeed have led to the abandoning of these places as worthy ports. This is clearly seen in a site like Korkai of the Pandyas in Tirunelveli District, which after its Roman contacts had lost its sea-level situation and is now located nearly 6.5 kms. inland. It was this that led to the present day Kayalpattinam (Cael of Marcopolo) to rise in importance near Korkai, from the early mediaeval times. This evidence is widely confirmed by high sea-level changes in other stable regions of the earth with sea coasts, as in the Mediterranean, the Pacific islands, etc.

The prehistoric stage :

This Late Stone Age horizon has its own vestiges in Pondicherry region in the nature of reddish brown ferruginised lateritic high ground, as seen immediately west of Pondicherry town and running south along the Neyveli site. This high-ground presents a fossil, anciently marine-level and represents the consolidation of the sand dunes, on the Tirunelveli Teri analogy. Occasionally, microlithic tools of chert, chalcedony, crystal, agate and jasper have been picked up from these pellety lateritic high-ground, though systematic study of this area has yet to be done, as in other areas. The area, in its laterite, apparently presents an overlap of the detrital laterite (as of the Red hills-Pulaleri of the North Chengalpattu District) of the Late Stone Age, mixed with the Holocene ferruginised dune sand of the time bracket mentioned earlier (c. 10000 B.C.-1000 B.C.) and thus it would be necessary to identify and separate both in vertical section and in tool assemblage, the microlithic facies of these remote times.

Of the early Stone Age (Middle to late Pleistocene) times, Pondicherry area had been comparatively untouched by human settlement and was perhaps under the sea, as could be seen from the earlier discussion.

To sum up, human activity might have dawned, for the first time, in Pondicherry area somewhere about 12,000 years ago, and was largely nomadic but mainly given to small game with diminutive weapons like microlith, used for arrow-tip, knife-edges and the like. Then around 1000 B.C. or later, richer and settled life should have been acquired by the men, invested with Iron Age tool equipment, pottery

utensils and agricultural pursuits. They also acknowledged the cult of the dead and raised affectionate monuments to the dead kinsmen, in the form of 'megaliths' and urn burials, and there was maritime activity also. They rose into spectacular limelight with the attraction into their shores, of aliens like Greeks and Romans around the Christian epoch.

II. Early period

The beginnings of the early history of the area cannot be traced with much precision. It appears that the empire of Asoka, the Great Mauryan Emperor, extended as far as Ponnaiyar or Gadilam in South Arcot District and most likely included the area covered by the modern Pondicherry region. Mamulanar, a Sangam poet, says that the Mauryas led a warlike expedition to the south to subjugate the chieftain of Mohur (identifiable with the place of the same name in South Arcot District) when the Kosar were not able to conquer him. This is indirectly confirmed by the Tibetan historian Taranath who refers to Bindusara's conquest of the Deccan and South India lying between the two seas. Asoka in his inscriptions makes a distinction between the territories and peoples within his Empire and those outside by using the term *vijita* to denote the former and terms *anta*, *prachanta* and *pratyanta* to denote the latter. Those who were thus outside his Empire in the South were the Cholas, Pandyas, Keralaputras and Satyaputras. There were two branches among the Cholas who are referred to in plural, one of them according to Ptolemy (second century A.D.) ruling from Orthura identifiable with modern Uraiyur (a part of the present Tiruchchirapalli) and the other from a place called Arkatos, identifiable with Arkkadu, now a village near modern Thanjavur which was in the Chola period the headquarters of an administrative division called Arkkattu Kuram. Thus, if the Cholas who were in Asoka's period ruling over the lower Kaveri delta on the borders of his Empire in the south it may be presumed that the Empire of Asoka extended as far as the Gadilam in the South Arcot District and thus included a good part of the South Arcot District and the Pondicherry area. The region appears to have been occupied by a people who were mentioned in the Mackenzie manuscripts as the Kurumbars.

Not much is known about political conditions in the Pondicherry area till one comes to the period of the Pallavas of Kanchipuram in the fourth century A.D. Early Tamil literature mentions two territorial divisions in the northern part of the Tamil country, namely Aruvanadu and Aruvavadatalainadu. The Aruvanadu was probably the same as Arunoi mentioned by Ptolemy with its capital at Malanga ruled by Basaronaga. Malanga was obviously the same Mavilangai. This Aruvanadu covered the region between the Gadilam and Ponnaiyar in which were included the Pondicherry territory besides Marakkanam and Tindivanam in the

South Arcot District. The inclusion of Pondicherry in this nadu is also borne out by the evidence of the Bahur plates of the Pallava king Nripatungavarman which mention that the gift village of Vakur not far from Pondicherry was situated in the *Aruvanattukkilvali* (the eastern division of Aruvanadu). It was occupied by a people called in early Tamil literature as the Eiyar who are said to have been ruling over the Oymanadu. The Aruvavadatainadu was then occupied by a people called the Oliyar who appear to have been divided into several branches (Paloliar) and were probably of Naga lineage. It is not known if they had anything to do with the Kalabhras who are said to have been overthrown by the Pandya and Pallava kings in the course of the fifth and sixth centuries A.D.

The *Periplus Maris Erythraci* of the last quarter of the first century A.D. mentions three market towns and harbours in the east coast of South India through which trade with the western countries, particularly Rome, was carried on. The work says : "Among the market towns of these countries and harbours where the ships put in from Damirica and from the north, the most important are, in order as they be, first Camra, then Poduca, then Sopatma in which there are ships of the country coasting along the shore as far as Damirica". The three port towns have been respectively identified with Kaverippattinam at the mouth of River Kaveri (Thanjavur District), Pondicherry and Marakkanam (South Arcot District) called So-pattinam or Eyil-pattinam in Tamil literature. If the identification of Poduca with Pondicherry is correct then it must have been an important place through which the Romans traded with South India.

The importance of Pondicherry as a port is further supported by the evidence of the archaeological finds unearthed from Arikamedu. There was a Roman factory at this Arikamedu as is evidenced by a warehouse, dying vat, Roman pottery (Rouletted ware) and a few amphorae jars associated with the Romans. A number of potsherds inscribed with Dravidi letters were also unearthed in the course of the excavations. They bear close resemblance to the unity or the potsherds recovered from the excavations at Alagarai and Uraiyur (Tiruchchirapalli District) and Kanchipuram (Chengalpattu District). The writing may be assigned to the period roughly from the second century B.C. to second century A.D. Archaeological evidence shows that the site was first occupied by the end of the first century B.C. or the beginning of the first century A.D. But sometime in the second century A.D. the site seems to have been deserted for some reason and the place sank into insignificance.

The Pallavas :

With the commencement of the fourth century A.D. the history of Tondaimandalam gains unity and interest and our knowledge of the same becomes more clear and definite. The Pallavas of Kanchipuram are the earliest

known dynasty of rulers who held sway over the northern portions of the Tamil country and have left considerable archaeological and epigraphical material throwing light on their history and achievements.¹ Pallava rule over the Tondaimandalam region with Kanchipuram in the Chengalpattu District as the capital commenced in about the first quarter of the fourth century A.D. and continued till the beginning of the tenth century. Early Pallava rule extended over the southern portions of modern Andhra Pradesh also, though it is not certain whether the areas covered by the present Pondicherry and Karaikal had come under their hegemony. But it seems certain that by the time of Simhavarman (c. 580.-'86) father of Simhavishnu (586-610) and grandfather of the famous Mahendravarman-I (610-30) the southern limits of the Pallava kingdom extended as far down as the River Kaveri. The Pallankovil copper plate inscription of Simhavarman clearly attests to the fact that his son Simhavishnu conquered the land of the Cholas which was most probably under the Kalabhras then.

The origin and early history of the Pallavas are shrouded in mystery.

The earliest known ruler whose place in the pedigree can at least be tentatively determined is, as seen above, Simhavarman of the Manchikallu inscription. This ruler must have overthrown the Ikshvakus in the Andhra region. His kingdom appears to have included parts at least of the Bellary and Guntur Districts. The stone inscription of his reign and the Mayidavolu, Hirahadagalli and the British Museum plates are in Prakrit which shows that the rulers mentioned in them must have ruled prior to the rulers of the Sanskrit charters.

Sivaskandavarman of the Mayidavolu and Hirahadagalli plates was probably the son of Simhavarman of the Manchikallu inscription; and he is recorded to have performed the *Asvamedha Agnishtoma* and *Vajapeya* sacrifices. Kanchipuram appears to have been the capital of his kingdom.*² Vishnugopa, mentioned in the Allahabad pillar inscription of Samudra Gupta must have flourished in this period. It is puzzling indeed that he is not mentioned in any of the known Prakrit charters. The only Vishnugopa mentioned in a few Pallava charters appears to be a later ruler. It is possible that this Vishnugopa was a son of either Simhavarman or Sivaskandavarman and he fought with the Gupta Emperor on behalf of the Pallava king when the former invaded the South. A contemporary of Sivaskandavarman was Mayurasarman of the Kadamba dynasty who is said in the Talgunda inscription

* The Velurpalayam plates of Nandivarman-III of the ninth century records a tradition that Virakuroha, an early Pallava king, seized the insignia of royalty together with the daughter of a Naga king. Obviously this is a reference to the Pallava conquest of the Chuta Nagas of the Sanskrit charters.

of Kakusthavarman to have overpowered the frontier guards of the Pallavas and established himself in the dense forests about the Sri Parvata Hill (Kurnool District) following the insult by a Pallava asvasamstha when he went to Kanchipuram for higher Vedic studies in the *ghatika* at the place.

The next ruler Kumaravishnu-I is also said to have performed an *asvamedha* sacrifice. His son Skandavarman-II, referred to in one of the Omgodu plates and the Uruvapalle and Singarayakonda charters, is said to have acquired the kingdom 'by his own prowess'. He was succeeded by Viravarman who was 'the victor in many battles and the subduer of circle of kings'. The next ruler was his son Skandavarman-III who is said in the Vasanta grant of his son Simhavarman to have conquered the entire Dakshinapatha on the shores of the three oceans. This Simhavarman is perhaps the greatest of the Pallavas of the Sanskrit charters. Simhavarman was succeeded by his son Skandavarman who crowned the Ganga ruler Madhava-II. He seems to have had two sons, Nandivarman and Kumaravishnu-II. Nandivarman (c.490-520) who was probably the elder son succeeded his father on the throne and issued the Udayendiram plates. This Nandivarman was succeeded by Kumaravishnu-II (c. 520-540) who is said in the Velurpalayam plates to have captured Kanchi. This reference to the capture of Kanchipuram probably implies a recapture perhaps necessitated by a possible Chola interregnum in the Pallava kingdom either a little before or during the reign of Kumaravishnu. He must have re-established the Pallava hold over Kanchi after driving away the occupants. It is of interest to note here that Buddhavarman, son of Kumaravishnu, is described as "the submarine fire to the ocean of the army of the Cholas". Kumaravishnu-II was succeeded by Buddhavarman (c. 540-60) who in turn was succeeded by Kumaravishnu-III (c. 560-80), the grantor of the Chendalur plates. Nothing is known about the sons of Kumaravishnu-III and the Pallava throne appears to have passed on to Simhavarman-III (c. 580-86) of the Pallankovil plates. It is from the reign of this Simhavarman that a clearer account of Pallava history is possible.

The Indrapalanagara copper plate inscription of the Vishnukundi king Vikaramendrabattarakavarman-II reveals that he gained a victory over the Pallava ruler Simha (Varman) in Saka 488 corresponding to 566 A.D. Probably Simhavarman was associated with his father in the administration of the kingdom. Though Simhavarman was defeated in the north, his reign seems to have witnessed the gain of territories in the south, for his son *Yuvaraja* Simhavishnu is said in the Pallankovil plates to have conquered the Chola country of the Kaveri delta probably for his father. Thus the Pondicherry and Karaikal regions must have come under the Pallavas in the third quarter of the sixth century, if not earlier. The Kasakkudi plates state that Simhavishnu vanquished "the Malaya, Kalabhra, Malava, Chola and Pandya kings, the Simhala king who was proud of the strength of his arms

and the Keralas".³ The Malaya king referred to may be identified with Malayaman, the ruling chief of the Malainadu region in the Nadunadu with Tirukkoyilur (South Arcot District) as its capital. It is possible that the Pondicherry region formed part of this Malainadu. The region further south was probably under the Kalabhras. That the Karaikal area had also come under Simhavishnu may be guessed from the fact that Kanjanur on the River Kaveri near Narasingampet in the Kumbakonam Taluk is referred to as Simhavishnu Cathurvedimangalam in inscriptions.

Simhavishnu's son Mahendravarman-I was one of the gifted rulers of South India. He was the author of the satirical *Mattavilasa*, a play throwing a flood of light on the life of the times and the contemporary state of the Kapalika and Pasupata cults. According to traditional accounts this ruler was previously a Jain and was converted to Saivism by Saint Appar. The *Peria Puranam* which narrates this story (without mentioning the name of Mahendravarman but just calling him a Pallava king) states that he demolished the Jain monasteries at Pataliputra (Cuddalore) and out of the materials thus obtained built a temple for Siva at Tiruvadigai very near Cuddalore. Politically also the reign of Mahendravarman was significant. His rule over the present Guntur District may be inferred from his inscription in the Kapotesvara temple at Chezarla. But soon Mahendravarman lost this portion of his kingdom to Chalukya Pulakesin-II. The Kasakkudi plates credit him with a victory against his chief enemies at Pullalur. This place has been identified with Pullalur in the Chengalpattu District; but it is difficult to identify the unnamed enemies with any amount of certainty. It is said that it was in his reign that rock-cut architecture was started in the Tamil country and that the cave at Mandagappattu (Villupuram Taluk, South Arcot District) was the first to be scooped out. It is true at least so far as North Tamil Nadu was concerned.

The reign of Narasimhavarman-I (630-668 A.D.), son and successor of Mahendravarman-I, was politically eventful. His conquest of Vatapi, the Chalukya capital, is referred to in the Kuram, Udayendiram, Kasakkudi and Velurpalayam plates. His own inscriptions at Badami and Tirukkalukkunram confirm the conquest. He defeated Pulakesin-II in about 642 A.D. and occupied the Chalukya capital for sometime.

In the later years of Narasimhavarman the Chalukyas were able to regain their power under Vikramaditya-I. He was a son of Pulakesin-II. After settling down and repairing the damages done to the kingdom by the Pallava king, he started reconquering the lost territories. In the Gadwal, Savnur and Kurtakoti plates he claims to have fought with Narasimhavarman-I, Mahendravarman-II and Paramesvaravarman-I. He also claims to have "crushed the glory of Narasimha".

Apart from these claims, the actual presence of his inscriptions in the Nellore and Krishna Districts confirms that the Pallavas lost parts of the northern territories of their kingdom in the closing years of Narasimhavarman's reign. But the Pallava king continued to keep control over the Chola country.

Narasimhavarman continued to cut rock-cut temples, a practice that was started during the previous reign. Many of the monuments at Mamallapuram are attributed to his period. It was during his reign that the Chinese pilgrim Hiuen Tsang visited the Pallava kingdom. He has described the people of the kingdom as "courageous, thoroughly trust-worthy and public spirited" and recorded that they esteemed very much learning.

Narasimhavarman-I was succeeded by his son Mahendravarman-II (c. 668-69) who had only a short reign. The next ruler was the latter's son Paramesvaravarman-I (c. 669-691). Early in his reign Paramesvaravarman had to face an invasion from Chalukya Vikramaditya-I, who invaded Kanchi and even seems to have reached its outskirts. It is significant to note that the Pallava kingdom was invaded twice by the Chalukya within a short span of four years. While the Chalukya grants specifically mention the Chalukya victory over the Pallava king and even the occupation of Kanchipuram, the Pallava inscriptions speak of Paramesvaravarman's triumph over his Chalukya adversary. Obviously it is difficult to reconcile these contradictory claims though it is possible that each side is detailing its achievements in different phases of the conflict. It is also possible that Kanchi was temporarily occupied by Vikramaditya-I and recaptured by Paramesvaravarman. The Pallava General Paranjoti (cannonised later as Siruttondar) who marched against Vatapi captured it and brought spoils to his king, is placed in the reign of Paramesvaravarman-I by a few scholars. This would imply a second conquest of Vatapi—a possibility which draws strength from the references to Paramesvaravarman's victory over Ranarasikapura in the Kailasanatha temple inscription. In the Reyuru grant of Narasimhavarman-II, Paramesvaravarman is credited with the performance of an *asvamedha*. He was a devout Saiva and he is described as *Paramamahesvara* and *Paramabrahmanya*. He was a contemporary of the Saiva Saint Gnana Sambandar. The Kuram plates of his reign refer to the construction of the temple of Vidyavinita Pallavesvara at Kuram.

Narasimhavarman-II, also known as Rajasimha (c. 689-c. 729) succeeded Paramesvaravarman-I in about 689 A.D. His reign which lasted for nearly forty years constitutes the most glorious chapter in Pallava history. He has left a large number of inscriptions; but most of them are in the form of strings of titles assumed by him or verses imploring the grace of Siva. In the Kasakkudi plates Rajasimha is described as the "complete incarnation of the blessed Paramesvara who equalled

Narasimha both by (the strength of) his body and by (his) name (Narasimhavarman) that spread over the world. This crest-jewel of the Kshatriyas bestowed his wealth on temples and Brahmanas (and) devoutly caused the goddess of the earth who was in his possession to be enjoyed by those familiar with the four vedas". His reign was essentially a reign of peace and creative pursuits. Apart from the Kailasa-natha and a number of smaller temples at Kanchipuram he also constructed the Shore Temple at Mamallapuram and the Talagirisvara temple at Panamalai in the South Arcot District. He claims to have got rid of all impurity by walking on the path of the Saiva doctrine. Some of his inscriptions are soul-stirring pieces of devotional literature couched in excellent Sanskrit poetry.

He was succeeded by his son Paramesvaravarman-II who ruled from c. 728-29 to 731-32. Only one record of Paramesvaravarman-II dated in his third regnal year and registering a gift of gold has come to light. This has been found in the Virattanesvara temple at Tiruvadigai in the South Arcot District and not far from Pondicherry. He had a short reign of about three years and was defeated by the Chalukya prince Vikramaditya who was able to overpower the Pallava ruler with the help of the Ganga king Ereyappa. Paramesvaravarman-II appears to have retaliated and attacked Ereyappa but lost his life in the course of the battle. The death of Paramesvaravarman-II resulted in anarchical conditions in the Pallava kingdom. After some dramatic suspense and confusion the crown passed on to Nandivarman Pallavamalla (c. 731-96) a prince from a collateral branch. With the accession of this prince Pallava history enters a new phase.

The circumstances under which Nandivarman Pallavamalla ascended the Pallava throne are of more than usual interest. The Pattattalmangalam plates of his sixty-first regnal year say that he was the son of Hiranyavarman and he came to the throne when he was quite young while the Kasakkudi plates dated in the twenty-second year of his reign give the additional particulars that he belonged to the branch of Bhimavarman, his sixth ancestor and the younger brother of Simhavishnu of the main line that he was "chosen by the subjects" as king, and that he "was engaged in ruling the kingdom of Paramesvara Potaraja". How this young boy-prince of a junior branch of the Pallava family came to occupy the throne after Paramesvaravarman-II and what circumstances necessitated the people to "choose" him are problems for which possible answers are provided by the inscriptions serving as labels for the historical sculptures on the walls of the Vaikuntaperumal temple at Kanchipuram probably built by Nandivarman.

Nandivarman Pallavamalla had a long reign of sixty-five years. It was politically eventful and witnessed the disappearance of the Western Chalukyas of Vatapi and the rise of the Rashtrakutas in both of which Nandivarman played considerable

role. At least five copper plate charters of his reign—the Udayendiram, Kasakkudi, Pullur, Tandantottam and Pattattalmangalam plates—have come to light, not to speak of many of his stone inscriptions. Of these the Kasakkudi plates are of particular interest as they were found at Kasakkudi near Karaikal showing thereby that the area was then an integral part of the Pallava kingdom. These plates issued in the twenty-second year of the king's reign state that he reigned in the place of Paramesvaravarman-II. They also trace his genealogy from Bhimavarman, the younger brother of Simhavishnu. It is to be noted that it is only in this grant that the succession of the younger line is alluded to.

Nandivarman's copper plates mention an impressive list of kings vanquished by him. We are told in the Pullur plates that his orders were obeyed by the Kerala, Chola, Pandya, Malava, Kalabhra, Bana, Andhra, Sindhava, Santavamkuravara, Ganga and Kadamba kings. Obviously this is a conventional boast. He did conquer some of his contemporaries and secured creditable victories. While there must be some basis for all these boastful claims it is also probable that Nandivarman Pallavamalla had to suffer a defeat at the hands of his Pandya contemporary, Maravarman Rajasimha-I (730-68). The Velvikkudi grant says that this Pandya defeated Pallavamalla who fled from the battle field.

The Chalukya records also mention that Pallavamalla was defeated and put to flight. The Kannada inscription of Chalukya Vikramaditya-II at Kanohipuram would suggest that he himself conducted the expedition personally and was present at Kanohi when the Chalukya forces occupied the city. Nothing is heard of Nandivarman Pallavamalla for some years. Though any clinching evidence to prove his whereabouts during this period is wanting it is possible to presume on the basis of the probabilities of the times that he had gone to the court of the Rashtrakuta Dantidurga, stayed in his court and participated in his wars of conquest and got back his throne with his help. He even seems to have married Reva, a Rashtrakuta princess. Probably these wars had to be waged by Dantidurga, the Rashtrakuta prince, and Nandivarman who seems to have sought refuge with him along with his General Udayachandra was presumably co-operating with him in these wars. Dantidurga is said in an inscription in the Dasavatara temple at Ellora to have won victories against Kanohi among other places. It is possible that he conquered Kanohi for Nandivarman Pallavamalla and reinstated him there. This must have naturally angered the Chalukyas and soon the Chalukya prince Kirtivarman who was a *Yuvaraja* undertook an invasion of the Pallava kingdom. The Pallava king was defeated but he continued to rule. After stabilising himself Pallavamalla turned his attention towards the Gangas. The jewelled necklace of the Pallava family which had been snatched away by the Ganga king Bhuvikrama during the days of Pallava Paramesvaravarman-I, was still with the Gangas; and Pallavamalla was understandably anxious to get it back. He engaged them in a battle in which the Ganga ruler

Sripurusha was able to gain victory initially and snatch the Pallava umbrella; but the ultimate success was that of Pallavamalla who took back from the Gangas the neck ornament containing the gem *Ugrodaya*.

Nandivarman's reign was thus almost continuously eventful. But unfortunately it is not possible to fix the chronological sequence of the events recorded in his inscriptions. He maintained control over a large part of eastern Tamil Nadu as far down as the River Kaveri. The Vaikuntaperumal temple at Kanchipuram referred to as Paramesvara Vinnagaram by Tirumangai Alvar is generally believed to be an architectural essay of Nandivarman Pallavamalla.

Pallavamalla was succeeded by Dantivarman. It is interesting that Nandivarman Pallavamalla and Dantivarman—father and son—ruled for a total period of about 116 years. Though rather unusual this was not improbable. A few years after his accession Dantivarman was defeated by the Rashtrakutas; the Rashtrakuta King Govinda-III is even said in his British Museum Plates to have levied tribute from the Pallavas. The reason for this invasion is not known. It looks rather strange because Dantivarman was but the grandson of Govinda-III as Pallavamalla had earlier married Govinda's daughter Reva. It has been taken that this was the reprisal for the help extended by the Pallava ruler to Stambha or Kambha, the elder brother of Govinda-III in his bid for gaining the Rashtrakuta throne. That Dantivarman was actually defeated by Govinda-III and treated as a feudatory is evident from the Manne grant of the latter.

Many inscriptions dated in the regnal years of Dantivarman have been found. An interesting feature about them is that no inscription assignable to the period from his twenty-second regnal year to the forty-eighth regnal year has been discovered so far. This has given rise to speculations regarding his possible overthrow during this period by a powerful chief. But he seems to have re-established himself with the help of his son Nandivarman-III who claims to have defeated his enemies at Tellaru near Wandiwash in the North Arcot District prior to his accession. The queen of Dantivarman was a Kadamba princess named Aggalanimmati.

Nandivarman-III referred to in many inscriptions as Tellarrerinda Nandi ascended the Pallava throne in 846 A.D. and ruled till 869 A.D. He is the hero of the Tamil work *Nandikkalambakam*. The enemies whom he defeated at Tellaru to enable his father to regain his hold were probably the rising Cholas. Though Nandivarman's inscriptions are found in the Chola country as far south as Senni-vaykkal in the Lalgudi Taluk in the Tiruohchirapalli District, his record at Lalgudi is dated in the regnal year of Pandya Varaguna-II, 4 indicating perhaps that a major part of the future Chola country was actually under Pandya occupation while the

Pallavas had also considerable power and influence in the area. By about 862 A.D. Nandivarman-III appears to have fought along with Pandya Varaguna-II against a rival to the Pandya throne who was helped by the Sri Lanka ruler. But it was Nrpatunga, the crown prince, who conducted the operation. Nrpatunga, Aparajita and Kampavarman are the last three rulers of the Pallava dynasty. The genealogy and chronology of the later Pallavas have attracted the attention of several scholars and according to recent researches, Nrpatunga and Kampavarman were respectively the first and second sons of Nandivarman-III while Aparajita was probably step-brother of Nrpatunga, born to Nandivarman-III by his queen Marambavai who is referred to in more than one inscription. 5

The Bahur plates of Nrpatunga issued in his eighth year and found at Bahur near Pondicherry is an important document for a study of the reign of this king. There are a number of inscriptions in the Sri Moolanathar temple at Bahur from this period. Two verses in this grant provide interesting information about him by stating that this king "by whose favour the Pandya had obtained an army formerly burnt a confederation of enemies in a battle on the further bank of the Arichit (river). Even in his youth (this) lord of the world (was) renowned (by the name) of Nrpatunga (i. e. the high one amongst rulers of men). (He was) renowned not only on earth (but) even in the other (world) like Rama". What emerges clearly from this account is that Nrpatunga gave military aid to the Pandya king, defeated his combined enemies on the banks of the River Arichit and came into contact with Sri Lanka. (The third inference is based upon his being compared to Rama). The statement that he became "high amongst rulers of men" even in his youth may be taken to indicate that some of his achievements took place when he was a *Yuvaraja* under Nandivarman-III. His contemporary Varaguna-II had to face a rival who sought the help of the Sri Lanka king Sena-II for gaining the Pandya throne for himself. Nrpatunga, the crown prince, appears to have assisted Varaguna-II in facing his rival and establishing himself firmly. His victory over a confederation of enemies on the banks of the River Arichit can possibly indicate a triumph over the rising Cholas in the region. But the Cholas were emerging to be too powerful to be crushed easily. Further Nrpatunga's step-brother Aparajita had also become powerful by 892 A.D. and an inscription of that year from Takkolam in the North Arcot District calls that place Aparajita Chaturvedimangalam. Probably Aparajita allied himself with the Chola Aditya in his bid for the Pallava throne. From the Udayendiram plates of the Ganga king Prithivipati-II it is clear that Aparajita and Prithivipati-I fought against Varaguna who was always in league with Nrpatunga. Varaguna was defeated at the battle of Sripurambiyam (895 A.D.). It is not known why this battle was fought. What is interesting is that nothing is heard of Nrpatunga after this battle and until his forty-first year. Either he was taking shelter somewhere or he had reconciled himself to the position of subordination to Aparajita.

Aparajita who thus became the ruler of the Pallava kingdom seems to have ruled till 913 A.D. but his sway was confined to Tondaimandalam. The role of Kampavarman, the brother of Nrpatunga in the clash between the latter and Aparajita is not known. That he reigned over a part of the kingdom is however indicated by his inscriptions. Presumably he had joint suzerainty with the last Pallava ruler and his kingdom was absorbed by the Cholas in 913 A.D. The entire Tondaimandalam region, as also the Pondicherry area, passed on to the hands of the Cholas, a rising and powerful dynasty that was to play a significant role in the political and cultural history of South India for about four centuries.

The Cholas :

The history of the Cholas of the Thanjavur line begins with the accession of Vijayalaya. The exact year of Vijayalaya's accession and the period of his rule are at present indeterminable and could at best be presumed only on the basis of the reign period of his illustrious son and successor Aditya-I. The Takkolam inscription of the latter dated in his 24th year refers to a solar eclipse and on the evidence of this astronomical data it has been established that he must have ascended the throne in 870 A.D. or 871. This in all probability is a pointer to the upper limit of the reign of Vijayalaya though no evidence suggestive of the lower limit has yet come to light. It is not known how or when the Pondicherry area came under the Cholas. Only one inscription hailing from Virasolapuram in the South Arcot District and dated in his third year is assignable to him; and in this he is referred to as Tanji-kotta Parakesari which has been read by the epigraphist as Tanjaikonda Parakesari and translated as "Parakesari, the Captor of Tanjore". Actually Tanjaikottam is the name of the geographical division and it is possible that in his initial years Vijayalaya was only a vassal under his Pallava overlord. A later inscription of Vikrama Chola from Kilputtur in the North Arcot District refers to the fourth year of Vijayalaya. There is no evidence to show that Vijayalaya's reign lasted more than four or five years. If it is taken that he ruled for four or five years, the beginning of his reign may be placed in circa 865 A.D.

Much of the information about Vijayalaya is provided by later inscriptions. The Tiruvalangadu plates of Rajendra reveal that Vijayalaya captured Thanjavur and founded a shrine for the Goddess Nishumbhasudani. The Kanniyakumari inscription of Virarajendra, however, states that Vijayalaya founded Thanjavur which is obviously a boast as the city had already been founded and was thriving as a seat of Muttaraiya power.

Vijayalaya's son Aditya ruled from 870-71 onwards. It is generally believed that as 907 A.D. was the initial year of Parantaka, Aditya must have died in the same year. But considering the fact that many achievements are jointly claimed

for both Aditya and Parantaka it is possible that both of them ruled jointly for some years, Aditya as the ruler and Parantaka as the crown prince, and that the former's reign extended to a few more years after 907 A.D. Such instances in Chola history are not wanting.

Aditya began his political career by overthrowing the tottering Pallava kingdom and extending his sway to the northern limits of the Tondaimandalam. The Tiruvalangadu plates say that Aditya fought against Aparajita and the Kanniyakumari inscription reveals that he killed a Pallava ruler in battle. In reconciling the two statements it is held that Aditya killed Aparajita; and if this were really so Aditya must have lived at least upto 913 A.D. the last known year of Aparajita.

The Tillaisthanam inscription of Rajakesari identified with Aditya-I describes him as Tondainadupavina (Tondainaduparavina) which means he who extended (his kingdom) to Tondainadu. This is confirmed by the presence of a considerable number of his inscriptions in the Tondaimandalam. It shows also that the Pondicherry area was an integral part of his kingdom. Nilakanta Sastri has dated Aditya's annexation of the Pallava territory about 890 A.D.,⁶ but the revised chronology of the latter Pallavas warrants a reconsideration of this date. Nrpatunga's inscriptions are to be found till 895 A.D. in Tondaimandalam. It is possible that even during the time of Aparajita, inscriptions in the name of Aditya were issued in parts of Tondaimandalam. Aditya's hold over Tondaimandalam became firm sometime during the turn of the century.

Aditya's conquest of the Kongu region in the west is mentioned in the *Kongudesa-rajakkal*; and the presence of Parantaka's inscriptions there confirms this. His reign also witnessed the ushering in of a new Chera power which seems to have led to the migration of a few families from Kerala to the Tamil country. Aditya met with his death at Tondaimanad in the Chittoor District where his son built for him a sepulchral shrine. According to the Anbil plates of Sundara Chola, Aditya built temples along the course of the River Kaveri from the Sahyadri mountain to the sea, not all of which are extant and identifiable now.

Aditya's son Parantaka, as mentioned earlier, ascended the throne in 907 A.D. Aditya had another son, Kannaradeva by name who was presumably born of a Rashtrakuta princess and thus a grandson of Krishna-II. Parantaka had to encounter Rashtrakuta resistance even at the outset which was directed to instal Kannaradeva on the Chola throne. Parantaka not only thwarted such attempts but justified his accession by remarkable achievements in war and peace.

The invasion of the Pandyan territory and its acquisition was an initial achievement of Parantaka. He seems to have captured the Pandya capital Madurai early in his reign as an inscription dated in his third year bears the title *Maduraikonda*. The Pandya king who suffered discomfiture was Rajasimha. The Sinhalese work *Mahavamsa* narrating the events in this regard says that during the reign of Kassappa-V (913-23 A.D.) the Chola ruler defeated the Pandya and the latter appealed to the Sri Lanka king for help; this resulted in a war in which the Cholas defeated the combined forces of the Pandya and Sri Lanka rulers. Ultimately the Sri Lanka forces had to be recalled as a result of a plague. The Chola triumph over the Pandya and Sri Lanka king is also described in the Udayendiram plates of Ganga Prithivipati (921-2 A.D.). One phase of the battle was fought at Velloure in which the Paluvettaraiyar chief Kandan Amudananar fought for the Cholas and gained victory. Continuing the narration the *Mahavamsa* states that during the reign of Dappula-IV (923-34 A.D.) the Pandya king took refuge in Sri Lanka and on finding that his sojourn there was of no use went to Kerala after leaving his diadem and other valuables in Sri Lanka. Pandya Rajasimha was the son of a Kerala princess and hence his taking shelter in his uncle's court was but natural. Presumably he could not do that before his sojourn in Sri Lanka in view of the cordial relations between the Chera and the Chola powers. The ambitious Parantaka desirous of crowning himself with the Pandyan insignia, invaded Sri Lanka to capture the diadem during the reign of Udaya-IV (945-53 A.D.) The king fled to Rohana; but the Chola purpose could not be fulfilled.

Even before Parantaka could complete his affairs in the south, his kingdom was invaded from the north-west by Rashtrakuta king Krishna-II. It has already been seen that Krishna-II seems to have tried to instal his own grandson Kannaradeva on the Chola throne which was thwarted by Parantaka. Krishna-II was joined by the Banas while Parantaka was assisted by the Ganga King Prithivipati-II. At Vallala (Tiruvallam) the Chola army triumphed over the Rashtrakuta and Bana forces sometime about 910-11 and as a result Parantaka earned the title *Vira Chola*.

The steady rise of Parantaka and the extension of the Chola sway over the neighbouring kingdoms came to a sudden halt with the invasion of the Chola kingdom viz., Rashtrakuta Krishna-III (939-67). The chronology of this event is a subject on which different opinions have been expressed. If the considered view of Nilakanta Sastri is accepted, the year of decisive battle can be placed in 949 A.D. The invasion was preceded by many political developments and Parantaka himself had anticipated them. He stationed forces under his son Rajaditya and the Kerala General Vellangumaran in Tirumunaippadi in the South Arcot District as the first line of defence. Unfortunately for Parantaka there was a change on the Ganga throne; Prithivipati-II had died and was succeeded by Bhutuga-II who had married a sister of Krishna-III. The Ganga forces were therefore on the Rashtrakuta side when

the battle of Takkolam took place in 949 A.D. Bhutuga killed the Chola prince Rajaditya and got as reward from Krishna-III the districts of Banavase 12,000 and Belvala 300. Though the ultimate defeat of the Cholas seemed inevitable the resistance offered was considerable. Not before 953 A.D. could Krishna-III record inscriptions in his name in the conquered areas. Krishna's victory is eulogized in Rashtrakuta inscriptions and he is mentioned in his Tamil inscriptions as *Kanchchiyum Tanjeiyum Konda*; it is highly doubtful whether he actually accomplished the conquest of Thanjavur. But it may be taken that the Pondicherry area was affected by the impact. Six of his inscriptions, three bearing his twenty-second regnal year, one his twenty-sixth and two his twenty-seventh recording grants to Sri Moolanathar temple at Bahur are found in it.

The effects of the invasion were disastrous from the Chola point of view; and for the aged king who had built up a kingdom from a small and modest principality, the death of his son was indeed a rude shock. He did not survive long.

The period of about thirty years between the death of Parantaka (c. 955 A.D.) and the accession of Rajaraja, the next important and the greatest of all the Chola rulers (985 A.D.) witnessed the rule of four rulers viz., Gandaraditya, Arinjaya, Madhurantaka Uttamaohola and Parantaka II-(Sundara Chola). We also hear of a Parthivendravarman who has been identified with Aditya-II Karikala, son of Sundara Chola. The history of this period is confusing and different schemes of succession have been suggested.

The reign of Parantaka's son Gandaraditya was short and perhaps he died in about 957 A.D.—when the Rashtrakuta forces under Krishna-III were still in the occupation of Tondaimandalam. It was his pious wife Sembiyan Mahadevi who built many temples for Siva at a number of places and rebuilt old brick temples into stone ones and made extensive donations for them. Gandaraditya was succeeded by his brother Arinjaya whose very short reign was followed by that of his son Sundara Chola also known as Parantaka-II. He had an encounter with his Pandya contemporary Virapandya at Cevur; his young son Aditya-II played a conspicuous role in bringing about a Pandya rout and earned the title *Vira Pandyan Talaikonda* (the captor of Vira Pandya's head). The Sinhalese appear to have aided the Pandyas in this war for we find Parantakan Siriyavelar of Kodumbalur a Chola feudatory, marching against Sri Lanka. He, however, fell in the battle. Sundara Chola's reign also saw the replacement of the Rashtrakuta hold by Chola hegemony over the Tondaimandalam. He was succeeded by Gandaraditya's son Uttamachola and not by his own son Aditya-II who appears to have been murdered perhaps with the

connivance of Uttama. The murder was not avenged throughout Uttama's reign (970-985 A.D.) and it was only in the reign of Rajaraja that punishment was meted out. Rajaraja the younger brother of the deceased Aditya-II, thought it politic to wait for his turn of fortune and did not contend against his paternal uncle.

Rajaraja expanded the boundaries of his kingdom by a number of successful wars. He started his conquests by attacking the Chera and Pandya kingdoms. In the first campaign he conquered the Cheras and Pandyas in the Malainadu (the western hill country identified with Kodagu or Coorg and captured the fortress of Udagai. In the second campaign he attacked Kandalur and Vilinam in Kerala. This was followed by a naval expedition against Sri Lanka. Rajaraja's success over the Sinhalese ruler Mahinda-V was so decisive that the latter had to take refuge in the hill country in the south-east of Sri Lanka called Rohana and the northern part of the island became a province of the Chola Empire under the name of Mummudi-Sola-Mandalam. The Sinhalese capital Anuradhapura was destroyed and Polonnaruwa was made the capital of the conquered area.

Rajaraja then turned his attention to the north and conquered Gangapadi, Nolambapadi and Tadigaipadi—all now in Karnataka State. This must have brought the Chola emperor into direct clash with his Chalukya contemporary, Taila-II. Taila claims in one of his inscriptions to have scored a victory against the Chola. In 997 A.D. Taila-II was succeeded by his son Satyasraya on the Chalukya throne. Rajaraja inflicted a crushing defeat on him and took his General Kesava as a prisoner. The Crown Prince Rajendra invaded the Kattapadi region and caused havoc in it; but Satyasraya was able to recover the lost territories and re-establish himself. As a result of these wars the boundary of the Chola Empire was extended to the Tungabhadra in the north.

Rajaraja had also to interfere in the affairs of Vengi. After Danarnava's short reign over the Eastern Chalukya kingdom of Vengi, it had passed into the hands of the Telugu-Choda Chief Jata-Choda Bhima. Rajaraja had not only given shelter to the exiled sons of Danarnava but also given his daughter Kundavai in marriage to one of them. He had also undertaken to restore the Eastern Chalukya throne to Saktivarman-I, the elder son of Danarnava. Provoked by all these, Jata-Choda Bhima invaded the Tondaimandalam but was defeated. In about 999 A.D. Rajaraja invaded Vengi and restored the Eastern Chalukya throne to Saktivarman-II.

Rajaraja's last conquest was that of the Maldives. In 1012 A.D. Rajendra was made the *Yuvaraja* and two years later Rajaraja seems to have died. The most splendid monument of Rajaraja's achievements is the Brihadisvara temple at Thanjavur. He not only built this monumental specimen of Dravidian architecture but also made liberal provisions for the maintenance of the temple and the regular

performance of temple rituals in it. Rajaraja stabilised the administration of his extensive empire by arranging for the survey and assessment of the country for purposes of land revenue by creating a centralised machinery for the administration of the empire by ensuring adequate autonomy to the local units and by creating a strong standing army and navy.

Rajendra (1012-44) continued with zest the military and cultural activities of his father and enhanced the size and prestige of the Chola Empire. Even early in his reign he appointed his son Rajadhiraja as *Yuvaraja*; for nearly twenty-six years Rajadhiraja served as *Yuvaraja* and played a significant part in the affairs of the state.

Perhaps the first expedition of Rajendra was the one in which he conquered Idaiturrai-Nadu, Banavase, Kollippakkai and Mannaikkadakkam. The next achievement of the king mentioned in his inscriptions is the conquest of the whole of Sri Lanka. The Sinhalese king Mahinda-V who had taken refuge in the south-eastern part of the island when Rajaraja invaded it, was taken prisoner and brought to the Chola country. Rajendra then turned his attention towards the Chera and Pandya kingdoms and after defeating their rulers appointed one of his own sons as Viceroy over both the kingdoms with the title Chola-Pandya.

Rajendra's active involvement in Sri Lanka and in the Chera and Pandya kingdoms had kept him busy for sometime; and during this time the Eastern Chalukya ruler Jayasimha-II was attempting to make good the losses suffered in the wars of Satyasraya. Jayasimha-II incurred the wrath of Rajendra by supporting the claims of Vijayaditya-VII against those of Rajaraja (grandson of Rajaraja Chola) and by occupying the Bellary region. In a fierce battle fought at Maski, Jayasimha was defeated. Vijayaditya was also trounced and his brother Rajaraja made the king. After accomplishing all this Rajendra proceeded further north, defeated the Eastern Ganga ruler Madhu Kamarnava and conducted an expedition to the Gangetic valley.

His next triumph was registered against the kingdom of Sri Vijaya with which the Chola empire had maritime and political contacts from the reign of Rajaraja. Rajendra's navy attacked Kadaram and its capital Sri Vijaya and the Chola success was almost complete.

In his last years Rajendra had once again to direct his attention to the Chera and Pandya affairs and to the happenings in Sri Lanka. The defeated princes of the Chera and Pandya dynasties started rebellions in the south which were suppressed by Rajadhiraja. In Sri Lanka Vikramabahu-I, the son of Mahinda-V continued his wars against the Tamils necessitating the sending of an expedition. This expedition

seems to have synchronised with Vikramabahu's death. There was complete confusion in the island which made Rajadhiraja's efforts easy. While the Chola sway over the Chera and Pandya kingdoms and Sri Lanka was thus re-established, Rajendra had to pay urgent attention to the happenings in the north. In the conflict between the Eastern Chalukya brothers Vijayaditya and Rajaraja (the latter being a grandson of Rajaraja Chola) the Western Chalukya ruler Somesvara took the side of the former and invaded Vengi. Rajendra had to urgently rush to the help of Rajaraja and hence sent Chola forces. The Chola army overwhelmed the Chalukya forces in the battle of Dannada. When Rajendra died after handing over the empire to his son Rajadhiraja it had reached its widest extent.

Rajadhiraja who succeeded Rajendra had to wage another war against Somesvara between 1044 A.D. and 1046. He not only defeated the Chalukya king and his subordinate chieftains but also destroyed the Chalukya palace at Kampili. This was followed by another battle at Pundur in which many were taken by the Chola as prisoners of war. This was further followed by the destruction of the palace at Mannandippai and the erection of a pillar of victory bearing the Chola emblem. After achieving this the Chola army marched further and attacked Kalyanapura (Kalyani), the Chalukya capital. After razing the Chalukya palace to the ground Rajadhiraja assumed the title of Vijayarajendra and performed the *Virabhiseka* (coronation of the victor). As a memento of his victory at Kalyanapura Rajadhiraja brought from that place a Chalukya stone carving of a *dvarapalaka*. This image containing an inscription stating that it was "brought by Udaiyar Sri Vijayarajendradeva after burning Kalyanapuram" was later installed in the temple at Darasuram in the Thanjavur District. *

But Rajadhiraja's sway over the Chalukya territory did not last long. Somesvara was able to drive out the Chola army and re-establish his hold over Vengi. He even forced Chalukya Rajaraja to acknowledge his suzerainty. He also sent an expeditionary force against the Chola territory which returned after attacking Kanohipuram. The infuriated Rajadhiraja started once again on an expedition against Somesvara; a fierce battle was fought at Koppam on the bank of the River Krishna. While Rajadhiraja himself led the war his brother Rajendra was holding himself in reserve. Rajadhiraja lost his life in the battle and a possible defeat was converted by his brother Rajendradeva into a triumph. After severely punishing the army of his enemy and inflicting defeat on it Rajendradeva returned to the Chola capital as the Chola emperor.

* It is now one of the exhibits in the Thanjavur Art Gallery.

Rajendradeva's role in the battle of Koppam is pointedly referred to in the *Kalingattupparani* and *Vikramasolan-Ula*. About 1059 A.D. his son Raja Mahendra was made heir-apparent. An early inscription of Raja Mahendra claims for him a victory over the Chalukya ruler at Mudakkaru. We learn from the epigraphs of Rajendra that the Chalukya ruler who could not reconcile himself to the defeat at Koppam attacked the Cholas once again on the banks of the Mudakkaru. This was probably the battle of Kudal Sangamam, described in the inscriptions of Virarajendra. The Chola army registered victory once again but both Rajendradeva and his son Raja Mahendra appear to have died soon after this event.

Virarajendra (accession 1062-63 A.D.) who became the next king claims to have defeated the Chalukya ruler thrice. We are told that he killed the king of Pottappi, the Kerala ruler, a younger brother of king Jananatha of Dhara and Virakesari, the son of the Pandya ruler Sri Vallabha. He conducted an expedition against Udagai and the Kerala country and collected a large tribute. But his main achievement was a victory against the Chalukya Somesvara in a fierce battle in which as many as seven Chalukya generals and the kings of the Ganga, Nolamba, Kadava and Vaidumba families are said to have been killed. The Chola victory was decisive and the defeated Chalukya king unable to bear the disgrace of this near rout, challenged the Chola emperor who had by now returned to his capital to meet him again at Kudal Sangamam for a battle. A great and fearless warrior that he was, Virarajendra accepted the challenge of his Chalukya adversary and reached Kudal Sangamam. He waited there for one full month beyond the date fixed by Somesvara who, however, did not turn up. Somesvara who had to taste defeat at Chola hands many a time drowned himself in the Tungabhadra on 29 March 1068 A.D. We are told in the Manimangalam inscription that Virarajendra proceeded from Kudal Sangamam to Vengi which by that time seems to have passed into the hands of the Western Chalukyas. Virarajendra defeated the Western Chalukya forces in a battle near Vijayawada and reached as far north as Chakkarakkottam. The regained Vengi was given to Vijayaditya who had submitted to the Chola emperor.

When the Chola emperor was thus gaining victory after victory in the Peninsula, the Sinhalese king Vijayabahu was attempting to drive away the Cholas from the island. A Chola general was able to punish the king and thwart his efforts. Vijayabahu, however continued to encourage and support opposition to Chola rule in the northern part of Sri Lanka. Virarajendra despatched enough naval forces to set his province in Sri Lanka in order and quell the revolt. In 1068 A.D. he sent another naval expedition, this time to Kadaram, to help a ruler who had sought his protection.

Virarajendra renewed his wars with the Western Chalukyas when Somesvara-II succeeded his father Somesvara-I in 1068 A.D. He conducted an expedition, burnt the city of Kampili and set up a pillar of victory at Kardigal. Somesvara-II was let down by his brother Vikramaditya-VI, who after seducing the feudatories of his brother entered into negotiations with Virarajendra and married his daughter. The Chalukya territory was virtually divided between the brothers and Vikramaditya became the ruler of the southern half.

Virarajendra was succeeded by Adhirajendra in 1070 A.D. He ruled only for a few weeks and after his death under suspicious circumstances was followed by Kulottunga Chola-I, who was an Eastern Chalukya prince with the name Rajendra-II. The circumstances under which Adhirajendra died are not known. There was however a state of confusion when Kulottunga ascended the throne. Kulottunga was the son of Rajaraja Narendra who himself was the son of Kundavai, daughter of Rajaraja Chola-I. Virarajendra's bestowal of the Vengi kingdom on Vijayaditya-VII had deprived Kulottunga of the Chalukya throne to which he was rightfully entitled. Virarajendra's death provided him an opportunity to snatch for himself the more coveted Chola empire. He was able to expel Vijayaditya from Vengi and annex it to the Chola empire. The logical development of this was a war between the Western Chalukya Vikramaditya and Kulottunga which was fought in 1075 A.D. at Nangili in the Kolar District. Kulottunga not only defeated his adversary but also acquired for himself the Gangavadi. In the next year Vijayaditya-VII died and Kulottunga sent his sons to serve as viceroys successively in Vengi. When his son Vikrama Chola was the viceroy, Southern Kalinga was successfully invaded and when a few years later the Kalinga king Anantavarman Choda Ganga refused to pay tribute, Kulottunga sent his general Karunakara Tondaiman to defeat the Kalinga ruler. The glorious success of the triumphant Chola army is the theme of the well known *Kalingattupparani* of Jayangondar.

After settling the affairs in the north, Kulottunga turned to the south. The Pandya kingdom took advantage of the confusion in the Chola empire as a result of Virarajendra's death and reasserted its independence. The Pandya princes started issuing inscriptions in their own names without recognizing Chola authority. For nearly four years Kulottunga was busy in re-establishing his authority over the Pandya and Kerala countries. We are told that he defeated five Pandya rulers, burnt the fortress of Kottaru, vanquished the Keralas, controlled the rebellious vassals and erected a pillar of victory on the sea-coast. The *Kalingattupparani* further mentions the victories gained at Vilinam and Salai. Though Kulottunga was thus able to bring back lost territories in the south under his sway he had to lose for ever the Chola hegemony over Sri Lanka. The Sinhalese ruler Vijayabahu drove away the Chola from the island and coronated himself as the master of the island in 1072-73.

He became an ally of Chalukya Vikramaditya and sent to him some envoys in 1084-85. When the envoys entered the Chola country on their way to the Chalukya kingdom their noses and ears were maimed and this led the Sinhalese king to start an expedition against the Cholas. But the Tamil mercenaries who formed a large part of the Sinhalese army revolted as a result of which the king fled to Wakirigala but was able to return soon and crush the revolt. Kulottunga made peace with Vijayabhahu and even offered one of his daughters to Sinhalese prince.

Kulottunga's reign also witnessed considerable overseas activities. In 1077 A.D. seventy-two persons from the Chola empire reached China and "were given 81,800 strings of copper cash, i.e. about as many dollars in return for the articles of tribute comprising glassware, camphor, brocades, rhinoceros horns, ivory, incense, rose-water, patchouli, asafoetida, borax, cloves etc.". The trade with Sri Vijaya was also vigorously continued.

In 1116 A.D. the Chola province of Gangavadi was attacked by Hoysala Vishnuvardhana and the Chola Governor Adigaiman was defeated. The Gangavadi was annexed to the Hoysala kingdom. Very soon the Vengi kingdom also slipped away from the hands of Kulottunga, for Anantapala, a general of Vikramaditya, is described as the ruler of Vengi. Though the empire thus shrunk in size in the last years of Kulottunga, it continued to extend over the southern regions of the Andhra country and maintain administrative hold notwithstanding ceaseless wars and disturbances. Kulottunga ushered in an era of comparative peace not known to his immediate predecessors. He is well known in inscriptions as well as in tradition as 'Sungam tavartha' i.e. he who abolished the tolls.

Kulottunga's son Vikramachola (1118-1135 A.D.) re-established Chola hold in Vengi when Vikramaditya-VI died and was succeeded by Somesvara-III. He also appears to have brought back Gangavadi under him but could not fully achieve his aim. Nataraja of Chidambaram was his family deity and he made liberal grants and extensive additions to the Chidambaram temple.

Kulottunga-II (1133-1150 A.D.) who succeeded Vikramachola continued the renovations and additions of the temple at Chidambaram and even made fresh additions. It was in his reign that the image of Govindaraja was removed from the Chidambaram temple. Though this is indicative of sectarian bias and intolerance, his reign was generally peaceful. Famous Tamil poets like Ottakkuttan and Sekkizhar flourished during his reign.

The next ruler was Kulottunga-II's son Rajaraja-II who started his reign from 1150 A.D. But he was associated with the administration even from 1146 A.D. His rule which lasted till about 1173 A.D. was marked by general peace in the kingdom. As he had no son, Rajadhiraja-II, a grandson of Vikramachola by a

daughter was made heir-apparent in 1166 A.D. The early years of Rajadhiraja-II witnessed a war of succession in the Pandyan kingdom which after the reign of Kulottunga-I had become practically independent notwithstanding its nominal acceptance of Chola suzerainty. The war of succession was between Parakrama Pandya of Madurai and Kulasekhara. The former who had sought the aid of the Sinhalese ruler Parakramabahu was killed by Kulasekhara. After this Kulasekhara took possession of Madurai. The Sinhalese ruler sent his army under his General Lankapura with instructions to remove Kulasekhara from the Madurai throne and offer it to a prince of the family of Parakrama Pandya. Kulasekhara sought the help of the Chola ruler and it was at this stage that the Chola Rajadhiraja-II interfered. Though military assistance was provided by the Chola king, Kulasekhara was defeated by the Sinhalese forces and Vira Pandya, a son of Parakrama Pandya, was placed on the Madurai throne. Kulasekhara, however, was ultimately able to recapture the throne with renewed Chola help. Rajadhiraja made the Sinhalese ruler accept that the legitimate ruler of Madurai was Kulasekhara. But he soon realised that the Pandya ruler was having treacherous dealings with the king of Sri Lanka, drove him out and made Vira Pandya, the son of Parakrama Pandya the ruler of Madurai. The reign of Rajadhiraja also witnessed a loosening of the grip of the central authority over feudatories for the Sambavaraya, Kadavaraya and the Malaiyan chiefs were often engaged in wars without taking serious notice of the central power. The Kadavarayas became an important feudatory power with Sendamangalam in the South Arcot District as their capital. The Pondicherry area appears to have been under them.

Rajadhiraja was succeeded by Kulottunga-III in 1178 A.D. His relationship with the mainline of the Cholas is uncertain. He had to involve himself in the affairs of the Pandyan kingdom as demanded by the sudden turn of events. The Sinhalese ruler Parakramabahu started once again his attacks against the Cholas in which Vira Pandya, who was installed on the Madurai throne by the Chola king, also appears to have joined. The Pandya kingdom was therefore invaded; after inflicting a defeat on the Sinhalese and Pandya forces, Vira Pandya was made to run away and a certain Vikrama Pandya was enthroned. After some unsuccessful attempts at regaining his throne Vira Pandya submitted to the Chola king. This involvement in the affairs of the Pandya kingdom was followed by a campaign in the west to contain the emerging Hoysalas. The Adigaimans and the Chera ruler were once again brought under Chola sway and at the end of all this Kulottunga performed a *Vijayabhisheka* in 1193 A.D. A few years later he had to invade the Pandya country again—this time to teach a lesson to the Pandya king Jatavarman Kulasekhara who had succeeded to the Pandya throne after Vikrama Pandya and shown insubordination to Chola authority. After defeating and restoring Kulasekhara, Kulottunga-III performed a *Virabhisheka*. When Kulasekhara was succeeded by his younger brother Maravarman Sundara Pandya in 1216 A.D., the Pandya king

wanted to punish the Chola. Almost immediately after his accession he marched against the Chola king, sacked Uraiur and Thanjavur and what is more, he was able to drive Kulottunga-III and his hei-rapparent Rajaraja-III into exile. But as Hoysala Ballala-II, whose assistance was sought by the Chola king, sent considerable forces under his own son to rescue Kulottunga and Rajaraja, Sundara Pandya had to give back the Chola kingdom to Kulottunga. But the veteran Pandya king made Kulottunga accept him as the suzerain lord.

The next ruler Rajaraja-III succeeded Kulottunga-III in 1216 A.D. and ruled till 1256 A.D. His reign saw some disturbances in Chola territories caused by some Oriya soldiers who were put down by Sundara Pandya. The Chola kingdom caught in-between the powerful Pandyas and Kakatiyas was already tottering and Rajaraja-III was not the kind of ruler who could rise to the occasion and face the challenges with tact. He refused to pay the annual tribute to Sundara Pandya and even started an invasion. The Pandya ruler defeated him and performed a *Vijayabhisheka* at Ayirattali. When the Chola king tried to flee and join the Hoysala Narasimha-II, he was made to fight another battle at Tellaru in which he was easily overwhelmed by the Kadava Chief Kopperunjinga. The Chola was taken prisoner. Infuriated by this, Hoysala Vira Narasimha, a good friend of the Chola king, attacked the Magara region in which parts of the present South Arcot and Salem Districts were included, and after fighting in a few places was ultimately able to secure the release of the Chola king and reinstate him on the throne.

It was the time when feudal vassals made themselves felt on political conditions during the period. One of them was Kopperunjinga or Maharaja Simha of Sendamangalam in the South Arcot District. He called himself a Kaduvettu or a Pallava. The area of his rule must have covered the Pondicherry territory also. Though he was made to realise his position by Hoysala Vira Narasimha-II, he assumed titles after 1243 which suggest that he was almost independent. He defeated the Hoysalas in Perambalur in 1252-3; but he was made to accept the overlordship of Jatavarman Sundra Pandya who successfully besieged Sendamangalam and got his co-operation in his northern campaign.

Rajendra-III, the last Chola ruler, ascended the throne in 1246 A.D. He conducted an expedition against the Pandya country and defeated two kings. But, however, he could not ultimately secure the victory he wanted because Somesvara, the son and successor of Hoysala Narasimha-II, had by now joined hands with the Pandyas. After this alliance, Rajendra's sway over the Chola region was short-lived because the Pandya ruler Jatavarman Sundara Pandya conducted many expeditions and soon extended his sway as far north as Nellore. Kanchipuram became his secondary capital and the entire Chola country became a principality of the Pandyan kingdom. Subsequently, however, Rajendra-III and Hoysala

Ramanatha, the younger son of Somesvara and the master of the Tamil region of the Hoysala kingdom established closer alliance between themselves to meet the Pandya threat. But in the year 1279 both of them were defeated by Maravarman Kulasekhara (1268-1310). And with this the Chola kingdom of which the Pondicherry territory was an integral portion became a part of the Pandyan kingdom.

The Pandyas:

Maravarman Kulasekhara, who thus became the master of the entire Chola country which included the present Pondicherry and Karaikal regions had an unfortunate end. He had two sons, Sundara Pandya the elder and Vira Pandya the younger, the latter by a favourite mistress. Kulasekhara wanted Vira Pandya to succeed him which naturally incensed the legitimate son Sundara Pandya. It is said that Sundara Pandya killed his father and became the king. Vira Pandya did not take this lightly and made an attack on Sundara Pandya. Sundara was initially successful but Vira Pandya who was helped by his cousin Mannar Perumal, the ruler of Karambati, carried on his fight against him. In the meanwhile Malik Kafur, who had been sent to the south by Ala-ud-din Khilji more for plunder and loot than for any political conquest, took advantage of the confused political condition in the Pandya country, attacked Vira Pandya on the banks of the River Kaveri and looted the riches of the temples. He did not even spare Sundara Pandya who had taken refuge in Madurai. Madurai was attacked and plundered. In looting and destroying the city, the invading Muslims did not discriminate between the rival and warring brothers. It was perhaps this common danger that brought some unity, though temporary it was, between Sundara Pandya and Vira Pandya. Both of them rallied under Vikrama Pandya, an uncle of Sundara Pandya and an able warrior who made Malik Kafur retreat in 1311 and returned to Delhi though with a large booty.

This was followed by the renewal of enmity between Vira Pandya and Sundara Pandya. The latter was driven out, as a result of which we are told he sought the help of Ala-ud-din Khilji. He was able to get the consent of the Sultan to utilise his forces at Devagiri for ousting Vira Pandya and recovering the Pandya kingdom for himself. But in the meanwhile, the ambitious Chera king Ravivarman Kulasekhara took advantage of the prevailing confusion in the Pandyan kingdom, defeated Vira Pandya and marched as far north as Kanchipuram. It was a challenge to both Sundara Pandya and Vira Pandya. Sundara Pandya appealed for aid from the Sultan of Delhi who asked Pratap Rudra of Warrangal to accompany the imperial army in its march to the south. Vira Pandya, however, managed to patch up with the Chera king.

In 1317 the Kakatiya forces under Muppidi Nayaka marched south, conquered Nellore, restored the Sambhuvaraya power in the North Arcot District and occupied Kanchipuram after defeating the 'Five Pandyas' who mustered together and resisted the Kakatiya invasion. Later the Kakatiya general marched further south and met Vira Pandya and Ravivarman Kulasekhara in a battle at Tiruvadikunram near Gingee, defeated them and helped Sundara Pandya to get back his throne. During this troublous period the Pondicherry area must have naturally suffered much.

Sundara Pandya did not enjoy much peace, for his kingdom was once again subjected to Muslim invasions. This time it was Khusrau Khan, General of Sultan Kutbuddin, who came down with looting and plundering. Sundra fled from his capital which was sacked by the invader. We are told that in plundering the wealth of the country Khusrau did not spare even the Muslims of the south and that at the sea port town of Pattan a wealthy Muslim was looted and insulted. But when Khusrau contemplated a rebellion against his master at Delhi he was carried back in fetters to the Muslim capital and forced to submit.

Sundara Pandya was followed by his son Parakrama Pandya. During his reign the Pandya country was invaded by Ulugh Khan, son of Ghias-ud-din Tughlak. He defeated the Pandya ruler, which resulted in the establishment of Muslim rule in Madurai. When Ulugh Khan became the Sultan of Delhi under the name of Muhammed-bin-Tughlak he evinced considerable interest in the southern provinces of his far-flung Sultanate. But his hold over Madurai was short-lived because the Muslim Governor who was appointed by Muhammed-bin-Tughlak to administer it was assassinated by one Sayyid Jalal who, after this event, proclaimed himself Sultan of Madurai and became the founder of an independent Muslim line of rulers over the Madurai area.

When all these events were taking place in the Chola and Pandya territories in quick succession, Hoysala Ballala-III was quietly extending his sphere of influence and sway over the area, parts of which are now covered by the North Arcot and South Arcot Districts and the Pondicherry territory. When Ghias-ud-din Damghani was ruling over the Sultanate of Madurai, Ballala-III marched to the lower reaches of the River Kaveri and besieged the fortress of Kannanar Koppam. The siege continued for nearly six months and at the end of it the Muslim forces agreed to surrender but wanted Ballala's consent to contact their Sultan at Madurai to finalise the terms of surrender. Ballala agreed to this which enabled Ghias-ud-din Damghani to march hurriedly, make a surprise attack on Ballala and kill him after taking away all his riches. He was succeeded by his nephew Nasir-ud-din by lavishly distributing gold to the nobles and the army. The next ruler was Adil Shah who was succeeded by Fakr-ud-din Mubarak Shah. It was under his son Ala-ud-din Sikandar Shah that

the short-lived Sultanate of Madurai was brought to an end in 1371-72 by the Vijayanagar prince Kumara Kampana who conquered practically the whole of Tamil Nadu (as far as Madurai) including the Pondicherry territory for the newly founded Vijayanagar Empire (1336).

One of the feudatory families that played a large part in the history of the North Arcot and South Arcot Districts including the Pondicherry area in the beginning of the fourteenth century was the Sambuvaraya family whose importance steadily grew from the period of Vikrama Chola. With the fall of the Chola hegemony they came under the supremacy of the Pandyas and accepted their nominal overlordship till about the period of the Pandya Civil War and the beginnings of Muslim invasions over the Tamil country. After that they became practically independent in their territory which covered the present North Arcot District and extended their rule over the Chengalpattu and South Arcot Districts also, till their power was put an end to in 1363 by the Vijayanagar prince Kumara Kampana, the son of Bukka Raya-I. The southern limit of the Sambuvaraya kingdom was probably the River Gadilam passing through Cuddalore and included the Pondicherry area also. During that period of about half a century there were two Sambuvaraya rulers, father and son, Venrumankonda Sambuvaraya (1320-39) and Rajanarayana Sambuvaraya (1339-63). Their capital was Virinchipuram near Vellore in the North Arcot District and Padaividu was their stronghold where they had erected a fortress on a hill called Rajagambhiranmalai. Though Gangadevi, the wife of Kumara Kampana, extols the exploits and achievements of her husband by saying in her *Vira Kamparaya Charitam* also called the *Madhuravijayam* that he killed the Sambuvaraya ruler in a duel, it appears that the ruler was defeated, taken prisoner and restored to his kingdom on accepting Vijayanagar overlordship. In this conquest of the principality of the Sambuvaraya which was also called Padaividu rajya or Rajagambhirarajya, Kumara Kampana was ably assisted by his Generals Gopanna, Saluva Mangu and Marayya Nayaka. Kumara Kampana ruled over the conquered territory as a mahamandalesvara. After his period the conquered territory appears to have been divided into two provinces, the northern part being called Padaividurajya and the southern part Tiruvadigairajyam, the latter with Tiruvadigai near Cuddalore as its headquarters. The Pondicherry area must have been part of the Tiruvadigairajyam.

Mangideva Maharaja who was obviously the same as Saluva Mangu refers to himself as *Sambuvaraya Sthapanacharya* which is a reference to his restoration of Rajanarayana Sambuvaraya to the throne. An inscription of Mangidevan in the temple at Villianur near Pondicherry dated 1370 A.D. records a free gift of twelve *ma* of land to the local temple, showing that the area conquered by Kumara Kampana and his generals became an integral part of the Vijayanagar Empire.

The Vijayanagar rulers :

The area covered by the Thanjavur and South Arcot Districts including the Pondicherry territory continued to be under Vijayanagar rule in the fourteenth and fifteenth centuries. But during the weak rule of the last two rulers of the Sangama dynasty of Vijayanagar, Mallikarjuna Raya (1447-65) and Virupaksha (1465-85) it should have suffered much on account of its invasion by the Gajapati rulers of Orissa and the rebellion of feudal vassals in the south. There appears to have been at least two military activities in the region between 1463 and '69. The first was an invasion of the area by the Gajapatis under the command of Kumara Hamvira and Kumara Kapilesvara Mahapatra, the son and grandson respectively of Kapilesvara Gajapati. The Orissan army marched down into the Tamil country as far as Tiruohohirapalli in 1463 taking on the way a number of places such as Chandragiri, Padaividu, Kanchipuram, Valudilambattu-Usavadi and Tiruvarur. But the military success was short-lived, for the Orissan forces had to retrace their steps thanks to Saluva Narasimha, the ruler of Chandragiri, who restored Vijayanagar authority over the conquered area. However, many places, particularly temples in the northern part of the South Arcot District appear to have been affected by the impact of the invasions. The Pondicherry area should have shared the sufferings.

Closely following this Orissan invasion, one Bhuvanekavita Samarakolahalan, a Bana chieftain who was ruling over the Madurai area, probably as a vassal of the Vijayanagar ruler, rebelled against imperial authority and invaded the territories as far north as Kanchipuram in 1469 and occupied the city. But soon Vijayanagar authority was restored in the conquered area possibly by Saluva Narasimha. This is borne out by a lithic record in the temple of Villianur near Pondicherry which mentions a gift of land to it for the merit of Saluva Narasimha and Virupaksha. The restoration of Vijayanagar rule over the Pondicherry area is also borne out by a number of grants made to the Virattanesvara temple at Tiruvadigai in the early seventies of the fifteenth century.

Still later in 1481 the Tondaimandalam area experienced the effects of a determined raid by the Bahmani ruler Muhammad Shah Bahmani-III (1463-82) who after inflicting heavy losses on many places on the way sacked the temple at Kanchipuram and returned with a large booty. Though it is not known if his forces marched further south of Kanchipuram, the South Arcot District and the Pondicherry area could have been affected by the invasion. The Muslim army was however driven back and order was restored in the devastated region.

Under the Saluvas and the early Tuluva rulers of Vijayanagar Vira Narasimha and Krishnadeva Raya there was no problem in the area covered by Tondaimandalam and further south. During the closing years of the reign of Krishnadevaraya, the administration of the empire appears to have been reorganised; and as part of the reorganisation three nayakships (or provincial rulerships) came into existence, namely those of Gingee, Thanjavur and Madurai. Though much clear information is not available regarding the origin of the Gingee nayakship, it appears that it covered all the region from the Palar (North Arcot District) in the north to the River Coleroon in the south. The Pondicherry region thus came under the nayakship of Gingee while the area covered by Karaikal and its environs in the Thanjavur District came under the nayakship of Thanjavur.

For want of reliable data it is difficult to form any definite idea of the genealogy and chronology of the nayak rulers of Gingee. The first ruler of the dynasty seems to have been one Krishnappa Nayaka to whom are attributed many of the fortifications and buildings in Gingee. The next ruler was one Achyuta Vijaya Virabhadra Nayaka who was a contemporary and subordinate of the Vijayanagar Emperor Achyutadeva Maharaya (1529-42). He was succeeded by Surappa Nayaka who was a contemporary and subordinate of the Vijayanagar king Sadasiva Maharaya (1542-67) and a patron of the well-known poet Ratnaksheta Srinivasa Dikshita, the author of the drama *Bhavana Purushottama*. The next ruler was Krishnappa Nayaka who was a subordinate of the Vijayanagar Emperor Venkata-II and a contemporary of Raghunatha Nayaka of Thanjavur. He, for some unknown reason, rebelled against his overlord, but was defeated and imprisoned. However, he was released from prison on account of the intercession of Raghunatha Nayaka. In gratitude for this, Krishnappa Nayaka gave his daughter in marriage to the Thanjavur Nayaka. He was a powerful ruler and the territories under his control were divided into three units, over the administration of each of which there was a feudal chief. They were Solaga who ruled from Devakottai at the mouth of the River Coleroon, the ruler of Tiruvadi near Cuddalore, about whom not much is known, and Lingama Nayaka, son of Chinna Bomma Nayaka who ruled from Vellore. Krishnappa Nayaka is said to have founded a town called Krishnapatnam near Parangippettai (Porto Novo) in the South Arcot District and at the mouth of the Vellar. Probably it may be identified with the present village of Agaram near Parangippettai. He continued to cherish ideas of independence and was probably irregular in the payment of tribute to the Vijayanagar Emperor. About 1600 Venkata wanted to send an army against him, but he did not do so for he heard that the Nayaka ruler was then insane, though it appears it was only a pretence. But Gingee was once again invaded in 1607 and the Nayaka ruler was defeated and made to submit to the Emperor. The Portuguese and the Dutch vied with each other to gain privileges from the Nayak for establishing factories and trading centres in Devanampatnam and Krishnapatnam but ultimately the Dutch gained advantage. Krishnappa Nayaka was a staunch

Vaishnava, and carried out repairs to the Govindaraja shrine in the innermost enclosures in the Nataraja temple at the place in spite of the protests of the priests of the Siva (Nataraja) temple some twenty of whom climbed one of the high towers of the temple and cast themselves down and died. It is said that Krishnappa got so angry with what they did that he caused his gunners to shoot at the rest which killed two of them, while many fled to different places. "A woman also was so hot in the jealous controversy that she cut her own throat."

To turn a little to Karaikal. In 1620 the Danes established a trading centre at Tarangambadi (Tranquebar) in the Thanjavur principality with the permission of Raghunatha Nayaka, the Nayaka ruler of Thanjavur. But the English were not able to establish a similar trading centre at Karaikal in 1624 since the Danes who had great influence in the Nayak's court persuaded the Nayaka ruler not to give them permission to do so.

Practically the whole of South India became involved in a civil war that followed the death of Vijayanagar Emperor, Venkata-II in 1614. Venkata had no son and so he nominated his nephew Sriranga-II to succeed him. He was supported by one Yachama Nayaka. But a putative son of the Emperor by one of his six wives was set up by one Jagga Raya and his supporters to succeed the Emperor which resulted in a protracted civil war. Krishnappa Nayaka of Gingee and Muthu Virappa Nayaka of Madurai supported the cause of the putative son, while Raghunatha Nayaka of Thanjavur supported the cause of the nephew nominated by Venkata-II. Jagga Raya slew the new king and the whole of his family except one boy called Rama, who was rescued by Yachama Nayaka with the help of the washerman of the palace. A grim battle was fought between the two parties at Toppur (near the Grand Anicut) in 1617. Jagga Raya and some of his relatives and attendants met with their death in the battle which was the signal for the general flight of the rebel army. Krishnappa Nayaka of Gingee also fled from the battle field "making himself ridiculous in the eyes of his officers". The prince Rama, the son of Sriranga-II who had been saved with the help of the washerman was made king. But the civil war continued for sometime. Yattiraja, the brother of Jagga Raya headed the rebel party and with the co operation of Krishnappa Nayaka of Gingee carried on the fight. The Thanjavur Nayak sent his army against the rebels and captured Bhuvanagiri on the banks of the Vellar near Chidambaram, besides a few other places. Yachama Nayaka, the protector of the Emperor, captured Palayamkottai also near Chidambaram. Krishnappa Nayaka of Gingee who was defeated in a battle had to accept the overlordship of the new emperor and pay homage to him.

During the days of Venkata-III, the successor of Ramadeva Krishnappa Nayaka of Gingee continued to have relations with his overlord which were not inimical, though indifferent. During the rule of Sriranga-III of Vijayanagar (1642-1671) the empire broke. Sriranga's policy towards his subordinates in the south

was one of friendship. But the Nayaks of Gingee and Madurai did not realise the need for strengthening the hands of the Emperor by their co-operation against the Sultans of Bijapur and Golconda who were trying to spread their power over the southern portions of the Vijayanagar Empire. To make Tirumalai Nayaka realise his subordination to the Emperor, he undertook military operations in the south. He attacked Gingee but to divert his attention from the south, Tirumalai Nayaka appealed to the Sultan of Golconda to invade the emperor's territories and attack Vellore. When Sri Ranga heard of it he retreated to the north and he is said to have gained a victory over the Muslims. But the Muslims made preparations for another attack. Sri Ranga wanted to get the co-operation of the Nayak rulers of the south against the Muslims and so went towards their territories. But he did not succeed in his attempt and so proceeded towards the west. At that time the Golconda forces marched to Gingee, captured it and pursued Sri Ranga who was moving to west, probably to seek the help of Sivappa Nayaka of Ikkeri. When Gingee was in trouble on account of its attack by the Sultan of Golconda, Tirumalai Nayaka sought the help of the Sultan of Bijapur against the besiegers, to save the Nayaka of Gingee. In 1648 Adil Shah of Bijapur sent an army under Khan-I-Khanan to save Gingee from its siege by the Golconda army. But the Generals of the two Muslim armies concluded an agreement according to which the Golconda General was to retire to the north leaving the work of taking Gingee to the Bijapur General. This foiled the plans of Tirumalai Nayaka who joined the Gingee army. But the Muslims succeeded and captured the city. The army marched further south into the territories of the Nayaka ruler of Thanjavur, and thinking that prudence was better than valour, the Nayaka of Thanjavur purchased peace by paying heavily to the invaders. In the course of the siege and capture of Gingee, the areas near it, as also places like Devanampatnam, Porto Novo (Parangipettai) and Puducheri (Pondicherry) suffered much. Thus the Gingee principality including the Pondicherry territory came under Bijapur whose rule over the area lasted for the next twenty-nine years.

After its capture by the Bijapuris the place was named Badshabad. Sayyid Nasir Khan was appointed to rule over Gingee as its first Killedar. Subordinate officers were appointed to the Killas of Valudavur, Tiruvannamalai and Palaiyam-kottai and other forts near Gingee. Fief holds on a military tenure basis were created in a few places in the area under the control of the new governorship. Sayyid Nasir Khan was succeeded by Nazir Muhammed Khan. It was during this period that the French made their settlement at Pondicherry in 1673.

III. The modern period

The arrival of the French :

The Portuguese were the first among the Europeans to establish a factory here even at the beginning of the XVI century. It was established after they had built one at Nagappattinam in 1521 and sometime before they had established another at San Thome in 1524. This is evident from "Da Asia" a book of geography published by J. Barros in the year 1553. 7 Muthukrishnappa (1595-1625) * 8 who was the Nayak of Gingee under Vijayanagar was involved in a war of succession following the murder of Sri Ranga-II in 1614. He found the Portuguese ranged against his side and therefore compelled them to abandon 'Puducheira'. In 1616 he invited the Danes who then had a trading post in Parangipettai (Porto Novo) to set up an establishment here. 9

In 1617, a French ship fitted out by the Company of St. Malo called on the coast and a Frenchman named Jean Pepin was permitted by the Nayak of Gingee to repair the Portuguese fort and to occupy it. 10 But Pepin returned to France soon after and the Thirty Years' War which started in Europe in 1618 prevented further progress. The same year, a Dutch officer from Tiruppapuliur (near Cuddalore) arrived in 'Puducheira' with his goods to obtain protection during the disturbed conditions caused by the attacks of Yachama Nayaka and the Nayak of Thanjavur on Gingee. The visit took place on 30 March 1618 and led to the building of a godown by the Dutch Agent Simon Joosten after whose death in 'Poelitsjeri, 11 the Dutch left the port in 1620. ** A map of Pierre Berthelot drawn in 1635 lists 'Polesere' 12 as a Danish trading port on the Coromandel Coast indicating that the Danish contact which began in 1616 might have continued in spite of the Dutch having been allowed into the town. In 1639 Francis Day, an English explorer from Madras, visited 'Pullicheri' 13 twice and stayed in the Danish lodge. 14 But by 1656, the Danes evacuated the port as a result of the Bijapur invasion and the fall of Gingee in 1648. Ramavel Krishnappa Nayaka succeeded in attracting the Dutch to 'Poudicheri' 15 but they remained here only between 1664 and 1670. 16

The first French *loge**** in India was set up in Surat in 1666 after Bebbber 17 who had been deputed from France to contact the Mughal Emperor had obtained a *firman* from Aurangzeb in favour of *La Royale Compagnie de France des Indes Orientales*. 18 The Royal Company was organised by Louis XIV on 1 September 1664

* A figure of Muthukrishnappa Nayaka flanked by two queens may be seen on a granite column in the Pondicherry Grand Bazaar.

** The town was also known as 'Pollochire' and Poulecere' among the Dutch.

*** A trading post.

on the advice of his Minister Colbert and with it was merged the earlier Company of St. Malo which had fitted out the voyage of Jean Pepin in 1617. The Company's charter also included the king's guarantee of protection and escort for the Company's ships with Royal men-of-war as well as the king's permission to the Company to send ambassadors, to make treaties or declare war on the sovereigns of India. 19 Thus the Company was vested with political powers.

In 1669, the French obtained another *firman* from Aurangzeb permitting them to establish a *loge* at Masulipatam. 20 The following year, the French Company obtained permission from the Rajah of Chirakkal in North Malabar to open a trading post in Tellicherry. A post was opened at Rajapur in North Konkan the same year. 21 The Masulipatam *loge* was placed temporarily under the care of Marcara who was an Armenian in French service; but Caron who was the Chief of Surat sent Goujon, a member of the Surat Council and François Martin to Machilipatnam (Masulipatam) where they arrived on 7 August 1670. Soon after their arrival they received a communication from Sher Khan Lodi, the Bijapur Commandant of Valikondapuram (near Perambalur in Tiruchchirapalli District) inviting the French to open a trading centre at 'Poudioheri'. Sher Khan Lodi's concern seems to have been to provide support to the handloom textile industry in his area by offering competition to the Dutch who were well settled in Parangipettai (Porto Novo) and Cuddalore. 22

A French mission was despatched in September 1670 to examine the site and the possibilities of trade. 23 The mission was favourably impressed and furnished an encouraging report pointing out particularly the large quantity of textile goods available in the area and its excellence. Even as the Frenchmen were here on their fact-finding mission, a messenger from Sher Khan Lodi arrived with a letter of invitation to the French. François Martin was keen on obtaining the sanction of the Councillor Caron (Goujon having died in Machilipatnam in September 1670) at Surat before he could do anything further in the matter. 24 Nothing, however, materialised till 1672. In July 1672, when Sher Khan Lodi learnt that a French squadron had sailed past Pondicherry and had captured San Thome from the Golconda Sultan, he renewed his appeal to the French. This letter was received by Blanquet de la Haye, the French Admiral when he was at San Thome. François Martin was also at San Thome at this time since the French had been forced out of Machilipatnam by the Golconda Sultan. 25 When San Thome was under siege by Golconda forces supported by the Dutch, de la Haye used Pondicherry as a supply base by sending a French guard to the place in August 1672 and also by sending the ship 'Le Navarre' in October 1672 for collecting victuals. On 4 February 1673, Bellanger de l'Espinay, a trusted lieutenant of de la Haye and a brigadier of his guards, landed in Pondicherry on orders from his admiral to establish a *loge*. This decision came as a blessing to the French when de la Haye was forced to surrender

San Thome to Golconda on 6 September 1674 as the French were able to fall back on Pondicherry. The naval squadron of de la Haye floated by Colbert "to establish the Company so strongly and powerfully that it shall be able to maintain itself and to increase and augment itself in course of time by its own power" failed miserably both against the Dutch and the local rulers of Sri Lanka and India.

Bellanger took up residence in what was once the Danish lodge and with him started the period of company trade which lasted for more than a century. Till 1790, the French were engaged in the trade of Indian muslin, organdie, long cloth and cotton textile as well as indigo, spices, rosewood, teak and precious stones. These items were in great demand in the European market and offered very wide margins of profit to distributors. The mercantilism of Colbert, however, did not encourage the sale of Indian products in France for fear of the country being depleted of bullion and on that count the French East Indies Company had to find markets in Mexico, Peru and the Antilles. 26 By 1673 Pondicherry had perceptibly grown from a hamlet of a few fishermen into a flourishing textile trading port. Its hinterland provided long cloth, mullmull, muslin, organdie, salem-puri, sailasse, Kanjeevaram and Pulicat textiles. 27

François Martin (1674-1706):

In 1673, when Bellanger de l'Espinay moved into Pondicherry, political conditions in the neighbouring kingdoms were quite disturbed and unstable. The last Vijayanagar emperor Sri Ranga-III having lost the battle of Erode (1670) died a heart-broken fugitive. 28 With his death Venkaji (the half-brother of Sivaji) and Chokkanatha who were the Nayaks of Thanjavur and Madurai became independent. Gingee had been conquered by Bijapur in 1648 and Nasir Muhammed was the Faujdar there while Sher Khan Lodi was the Faujdar of Valikondapuram. Both of them were more or less independent since Bijapur under Sikander Adil Shah was tormented with civil strife and Mughal invasions. Golconda had control as far as San Thome.

Bellanger was in Pondicherry only till 24 September 1674 when he sailed for France. François Martin, * who was assistant to him became **Chief** on 6 May 1675. With him in the **loge** were two Capucin priests and six Frenchmen; there were also sixty French soldiers who were on transit. In 1676, François Martin allowed himself to be dragged into a military conflict which had developed between Nasir Mohammed of Gingee and Sher Khan Lodi. At the behest of Sher Khan Lodi, Martin captured on 24 September 1676 the fort of Valudavur which belonged to Gingee. But before the conflict could develop further, Sivaji reached Gingee on

* François Martin had landed at Pondicherry on 14 January 1674.

his famous Carnatic expedition and captured it at the first assault. He then moved further south and in the battle at Tiruvadi near Cuddalore, Sher Khan Lodi suffered total defeat and was forced to flee. François Martin discreetly accepted the advice of Sivaji to remain neutral and therefore benefited with a *firman* dated 15 July 1677 granted by the Marathas. 29 On July 17, news arrived at Pondicherry of a treaty signed between Sher Khan and Sivaji by which the former ceded all the territories under his jurisdiction. On the same day, two Maratha Officers arrived at Pondicherry for administration of the French colony. In spite of Maratha depredations all around and the collection of forced levies from the inhabitants of Pondicherry, when the French ship 'La Vierge' called in at the port in 1680, it was able to secure cargo worth Rs. 50,000 consisting mostly of textile goods. 30

Bellanger had received a *firman* from Sher Khan Lodi when they met at Valikondapuram in November 1672. This authorised the French to use the Danish lodge at Pondicherry with its terraced building, tower and two large court yards. The *firman* did not confer any power over the inhabitants in the area for they remained subject to Bijapur nominally and to Sher Khan Lodi factually. The French Company was allowed to carry on trade from the town with the entire countryside on payment of transit duty to the Faujdar and to bring ships into the estuary for loading of cargo and provisions. They were permitted to secure the lodge with defences and to maintain their own guards within the same.

The *firman* of 1677 permitted the French on the other hand, to build godowns not only in Pondicherry but also in any other village or town for the purpose of storing merchandise. The monopoly of trade in Pondicherry was vested with the French and it was explicitly stated that although ships of other nations could call at Pondicherry, they could not engage in commercial transactions without French consent. The Maratha Havildar was to collect $1\frac{1}{2}\%$ sales tax and $3\frac{1}{2}\%$ customs duty over imports and exports. Local inhabitants like weavers, macouas (fishermen), textile printers and servants who worked for the Company were exempt from taxes which the other inhabitants were liable to pay the havildar. The Company's servants both French and Indian were to be tried only by the Company's courts. 31

The *firman* of 1677 which François Martin obtained from the Marathas was a noteworthy diplomatic feat for it granted extra territorial rights to the French Company. What de la Haye failed to achieve by show of force, Martin obtained through diplomacy and tact. In August 1676, Martin was informed by Duplessis, the French Chef at Balasore (Orissa) that authority had been granted by the Mughal Viceroy of Bengal to establish trading posts in Hooghly, Dacca (now capital of Bangladesh) and Kasim Bazaar but none of these French posts enjoyed the privileges which the *firman* of 1677 granted to Pondicherry. In 1681, Martin was summoned

to Surat by the Director and he remained there till 1686, leaving Pondicherry in charge of Deltor, his assistant. During his stay in Surat, he straightened out the problems of Machilipatnam with Golconda and the French reoccupied the *loge*. However, when Golconda was conquered by the Mughal Emperor Aurangzeb in 1687 a new *firman* had to be obtained from him. 32

François Martin returned to Pondicherry from Surat in 1686 as Director General and remained in charge till his death on 31 December 1706. At the time of his arrival the *loge* at Pondicherry "was nothing more than a large enclosure by the sea-shore where there were two bastions with eight pieces of cannon", according to Boureau Deslandes, son-in-law of François Martin. It formed an irregular rectangular structure with four round towers and was called Fort Barlong.*

Having arrived, Martin despatched Deslandes to Chandernagore to develop it into a French outpost. He then occupied a *loge* in Karaikal from December 1688 to June 1689; in 1701, Arnault was sent to the *loge* at Kozhikode. These efforts were halted when the Dutch brought up cannons to bombard Pondicherry on 23 August 1693 as part of their campaign in the war of English Succession. Martin saved the town by a quick and honourable capitulation. Yet François Martin and his family were confined as prisoners of war in Batavia for three months.

The Dutch then bought Pondicherry (1693) from Ramraja of Gingee paying a sum of 25,000 pagodas, and when in 1697, the Treaty of Ryswick restored Pondicherry to the French, the French became legal owners of the town. Although the Treaty of Ryswick was signed on 21 August 1697, it was only in September 1699 that Pondicherry was actually restored to the French and that too, only after they paid 16,000 pagodas to the Dutch. François Martin returned to take up his post as Chief Factor on 13 September 1699.

In 1703, Martin obtained Kalapet to the north of Pondicherry from Nawab Dawood Khan, Aurangzeb's Governor in the Carnatic. By 1706, Martin had completed the construction of a new fort which he called Fort Saint Louis modelled after the Fort at Tournai. But he had to pay Rs. 10,000 to the Carnatic Nawab and Rs. 2,000 to his subordinate officers, for permission to build the fort. The same year, the Nawab donated Ozhukarai, Murungappakkam, Olandai, Pakkamudiyanpet and Karuvadikkuppam. Pondicherry was now a sizable establishment with 700 Europeans and 30,000 Indians of whom 2,000 were Christians.

In the meanwhile, trade in Surat was under decline and Frenchmen were subjected to harassment by their creditors on land and the pirates at sea. Pondicherry at the same time grew to become a flourishing trading centre. This prompted the

* A plan of the town dated September 1699 is available in the Archives of the Ministry for Colonies.

issue of **Edit Royal** of February 1701 which transferred the **Conseil Souverain** from Surat to Pondicherry with François Martin as its President.³³ The **Conseil Souverain** had overall jurisdiction over all French establishments as a Court of Law.

The stabilisation of Pondicherry was the work of Martin as Governor during a period which was chequered both for him personally and for the town. The substance of his work can be evaluated only if the political conditions in the Carnatic and in France are recalled. Commerce for the French was banned in Surat in 1703 and the French establishments at Bantam and Tonkin had failed and were abandoned. Louis XIV had revoked the Edict of Nantes in 1685 dealing a severe blow to life in French harbours, trading centres and among the traditionally sea-faring communities. From 1689 to 1697 France was involved in a war against the English and the Dutch with disastrous consequences for its colonial plans and then in 1701, the Spanish Succession War ranged almost the whole of Europe against Louis XIV. While these stresses of European politics left François Martin at Pondicherry almost on his own, the situation in the areas around Pondicherry was even more appalling. Aurangzeb's forces, after the conquest of Bijapur in 1686 and of Golconda in 1687, marched into the Deccan to deal with the Marathas who after the execution of Sambhaji in 1689 had converted the Carnatic into a base of resistance against the Mughals. Gingee became a Maratha capital with Ramraja as Regent for Sivaji-II. In 1690, Zulfiqar Khan, the Mughal General, invested Gingee and the siege lasted for eight years. The factious infighting among the Marathas which led to the battle of Kanchipuram in 1696 between Santaji Ghorpade and Dhanaji Jadhav indicated how unsettled and disturbed political conditions were. Continuous warfare and indiscriminate looting by all armies, especially the Marathas, caused famine and epidemics throughout the Carnatic. Many hundreds entered Pondicherry to take refuge. Not only did François Martin face this perilous time with courage and fortitude but his tenacity was such that under him Pondicherry prospered while all around it was quite a different story. What was even more remarkable was that the victories of Martin were won not through acts of war but through the artifact of peace.

Religious pressures (1706-1718)

The charter of 1664 had bestowed the Royal French Indian Company perpetual concessions over Madagascar and the neighbouring islands on condition that it should promote the Catholic faith in these areas. Thus the Company was inclined towards evangelical work right from its inception. Two Capuchin priests, being forced to quit Madras by the English, took up quarters in Pondicherry in 1674 along with François Martin. They became attached to the

first church in Pondicherry built in 1686 by one Tanappa Mudaliar dedicated to Saint Lazarus, his patron-saint. Tanappa was from Madras who became François Martin's interpreter and negotiator.*

The Jesuits arrived in Pondicherry in 1675 and by 15 August 1692, they had established a church in Pondicherry with a centre attached to it where students from Bengal, Madras, Philippines, Surat and Ispahan were brought to learn Latin, Philosophy and Theology. The revocation of the Edict of Nantes in 1685 by Louis XIV marked a turning point. The Edict of Nantes (1598) issued by Henry IV had granted protestants in France the freedom to practise their religion. Encouraged by the events in France, the Jesuits in Pondicherry objected to the proclamation issued in 1708 by Hebert** which guaranteed all sections of the population the freedom to live according to their ancient customs. Hebert, however, refused to yield and earned their displeasure. They used their influence with Louis XIV to get Hebert recalled. Dulivier who became Governor for a second time after Hebert was prepared to accede to Jesuit demands. In 1714, he issued a proclamation banning the celebration of all Hindu festivals on Sundays and on Catholic festival days. This ban on Hindu religious activity was met with a large scale exodus of the population from Pondicherry. Weavers, dyers, artisans, fishermen, merchants and ordinary workmen left the establishment in protest. Dulivier was forced to retrace his steps and the population returned only when the order was rescinded. The Church authorities were most unhappy and started demanding that Nainiyappa Pillai, the dubash of the company, should be removed from office as punishment for his complicity in the popular resistance. Dulivier realised that Nainiyappa Pillai had not only rendered signal service to the French Company by successful negotiations with Gingee but that he enjoyed immense popularity with the local inhabitants, and he refused to give him up. The Jesuits once again used their influence at the Versailles Court and managed to get Hebert reappointed having got Hebert to make promises to them in Paris about his dependability in furthering Jesuit influence. Soon after Hebert's return to Pondicherry he also came into conflict with Nainiyappa Pillai, as he refused to assist Hebert

* J. Cotton : List of Inscriptions on Tombs and Monuments in Madras. His tombstone in the Church of St. Andrew at Madras states that "Tanappa Mudaliar, otherwise known as Lazarus Timothy of Agambadi Mudali (Caste Vellala) who was a founder of the French East India Company in Pondicherry died in 1691.

** Between 10 December 1706 and 1707 de Flacourt was interim in charge of the Company. He was followed by Dulivier who remained till July 1708 to be succeeded by Hebert. The period was uneventful with very little trading activity. Hebert's first term lasted nearly five years i.e. upto 1713.

in seeking personal profit through Company's trade. His personal disenchantment with Nainiyappa Pillai and the instigations of the Jesuits induced him to charge Nainiyappa Pillai with complicity in resistance to French rule. False witnesses were hastily tutored and the **Conseil Souverain** was used to perpetuate injustice by condemning Nainiyappa Pillai to prison where he died on 8 August 1717. His sons fought hard for the rehabilitation of their father's memory and one of them Guruvappa even sailed to France to plead the case at the court and embraced the Catholic faith while in France. The opposition of the local people, the support of the merchants of St. Malo and the sustained efforts of Dumas and Dulivier finally brought success. Hebert Senior and Junior were both arrested, tried and sent back to France having been found guilty of perjury and miscarriage of justice. True that Louis XV finally intervened and set at nought the Company's proceedings against Hebert but all the same the Jesuit efforts in carrying on their mission of conversion received a set-back. The invalidation of the proceedings against Hebert Senior and Junior in the face of overwhelming evidence proved that Pondicherry was being administered in the worst traditions of Bourbon despotism.

Lenoir (1721-1735)

Following the arrest and deportation of Hebert to France, de la Prévostière was appointed Governor in 1718 and he held office till his death in 1721. The mantle then fell on Lenoir whose first term lasted till 1723. He had a second term from 1727 to 1735. Benoit Dumas who was **Procureur du Roi** and had won popular esteem by his support to Nainiyappa Pillai was recalled to France instead of being named to succeed de la Prévostière. He was overlooked because of his involvement with interlopers and private trade. ³⁴ It was a group of Flemish merchants who had obtained a charter from Emperor Charles VI of Austria and floated the Ostend Company which quickly developed a prosperous trade with Bengal and China, its success being mainly due to smuggling goods into England and France in defiance of the monopoly vested in the India Companies by royal charters. In 1719 a ship of the Ostend Company was welcomed in Pondicherry and was allowed to load merchandise bound for France and Europe. The Directors frowned upon this involvement with private trade and showed their displeasure particularly against Dumas whose appointments as **Procureur du Roi** and as member of the **Conseil Supérieur** were cancelled.

Lenoir who first became Governor in 1721 was also in league with Dumas in this nefarious trade for, in 1728, while Dumas was functioning as Governor of **Ile Bourbon*** and **Ile de France**** he made a visit to Pondicherry ostensibly to discuss some constitutional dispute with Lenoir but actually to buy slaves from

* Now Ile de la Réunion.

** Now Ile Maurice (Mauritius).

Pondicherry. Lenoir bought 100 slaves, boys and girls between the ages of eight and twenty-five who were boarded on the 'La Sirene' bound for Ile de France and Bourbon. Slaves were cheap in Pondicherry because of the famine that came in the wake of the Mughal-Maratha wars in the Carnatic. The French colonists cultivated coffee, tea, indigo, jute and cotton in Bourbon and the islands nearby and they needed an unlimited supply of slaves to work in these plantations. This opened the way for the interlopers to carry on their trade not only in raw materials and finished goods but also in human cargo. 35

When Lenoir was Governor for a second term from 1727 to 1735 some changes took place in the jurisdiction of the *Conseil Supérieur*. All provincial councils of administration including the *Conseil Provincial de Bourbon* were placed under the *Conseil Supérieur de Pondichéry*. * He attended to the improvement of the judiciary and a new *juge de la chaudière* was found functioning at Mortandichavadi in 1730. 36 He improved the fortifications of Pondicherry by building new bastions. Trade registered progress with frequent ship arrivals.

Some territorial extension and consolidation was also attempted during this period. In Yanam, some lands were bought from Sherif Ahmed in 1731 and the estuary banks were protected from erosion. On the Malabar coast, the *logé* in Kozhikode (Calicut) was in debts and on the verge of bankruptcy. Lenoir was able to persuade Mollandin at Kozhikode to look for a more attractive pepper trading centre which resulted in the agreement dated 2 April 1721 between the Vazhunnavar of Badagara and the French India Company. But in 1725 when Beauvallier de Courchant ** was the Governor, relations between the Vazhunnavar and the French became so strained due to the machinations of the English Agent Adams at Tellicherry that the French were compelled to retire to Kozhikode with nearly a hundred Frenchmen belonging to all ranks. It was only in December 1725 when a squadron of ships commanded by de Pardaillan appeared and recaptured the town that the French returned to Mahi. 37 "As an acknowledgment of the skill and enterprise of his young captain, the Commodore, by a slight alteration of the letters which went to form the name of the captured town transformed it from the Indian Maihi or Mahi into the French Mahe—the first name of La Bourdonnais." 38 Peace was made between the French and the Vazhunnavar on 8 November 1726 at the mediation of the Zamorin.

* In 1728, when Dumas was Governor of Bourbon, Pondicherry lost its jurisdiction over the provinces.

** Beauvallier de Courchant was Governor of Pondicherry from 6 October 1720 to 4 September 1726.

On 12 October 1726 fighting broke out between the English and the French, when the English at Tellicherry attacked the territory of a French supporter named Kurungottu Nair. But on 28 April 1728 a treaty was drawn up by which the English and the French undertook not to fight in India even if war prevailed in Europe between their two countries.³⁹

Benoit Dumas (1735–1742) :

Benoit Dumas who succeeded Lenoir on 19 September 1735 was no stranger to Pondicherry. * “He was a shrewd, calculating, prudent man..... a lover of peace and anxious above all to extend the French Territories in India by smooth means”.⁴⁰ During this period the Company’s income came from payments by landholders, licence fees on tobacco, betel and arrack, chungam (Joncam-customs duties), *ad hoc* taxes collected from the inhabitants for fortification expenses and through public sale of confiscated contraband merchandise. In 1735 Dumas earmarked the proceeds from the sale of confiscated contraband for the Ursuline nuns who had been sent from France at his request for the running of a school for girls which the town lacked. On 15 September 1738, the **Conseil Supérieur** granted licence for the retail sale of arrack, Vichy water, red and white wine to Kariappa, a native merchant, providing that anyone guilty of illicit sale would have his stocks confiscated in addition to a fine of 100 pagodas, one third of which was earmarked for the projected girls’ school of the Ursulines. In January 1739, the **Conseil Supérieur** set aside for the Ursulines the $\frac{1}{2}\%$ *ad valorem* duty on all goods brought by road or sea into Pondicherry except those intended for export to Europe.

The concern shown by Dumas for education and the religious orders did not extend to the plight of the slaves. A letter written by the Directors to Dumas on 30 October 1736 may be quoted in part: “Since Indian slaves whom we have authorised you to despatch annually have not been asked for by La Bourdonnais, we regret that the order we have placed with the Conseil at Chandernagore need not be executed because we agree with you that prisoners of war would be more economical.”⁴¹

* He was **Procureur du Roi** from 8 February 1718 to 9 September 1722, was married in Pondicherry by special sanction to the Dutch Protestant minor Miss Marie Gertrude Van Zill on 23 July 1722. He was second-in-command under Beauvillier de Courchant from 20 October 1723 to 15 October 1724.

In 1739, Dumas sent an expedition to Basrah and with the consent of the Directors established Pondicherry's authority over Chandernagore. Over the isles of Bourbon and France too Dumas asserted Pondicherry's authority. La Bourdonnais who succeeded Benoit Dumas as Governor of Bourbon and Ile de France was from the French aristocracy and had used his influence in the royal court to get special powers for himself over the French ships in the Indian Ocean and also the privilege of writing directly to the Asian rulers. Dumas, however, effectively countered the moves of La Bourdonnais and finally compelled the Directors to restore the original jurisdiction of the **Conseil Supérieur** of Pondicherry over Ile de Bourbon and Ile de France.

Dumas was not found wanting in asserting his authority, when required, in his dealings with the religious authorities. When he found that the Ursuline sisters refused to accept the authority of the **Conseil Supérieur**, he went to the extent of halting supplies to them and thus forcing them to leave for France.

He was also not inclined to reduce the pomp and pageantry of Hindu processions, which the Jesuits objected to as a parade of 'obscene idols'. Dumas consistently refused to clip the religious observations of the Hindus and even went to the point of witnessing without interference the self-immolation of a widow on the funeral pyre of her husband at Villiyanur in 1740.⁴²

Dumas also achieved some success in extending the French territory in India through a policy of prudent diplomacy. In 1738 he negotiated with Sahuji of Thanjavur and obtained besides Karaikal, the fortress of Karakalacheri and five villages on payment of 40,000 chakras; this transfer was accepted by Chanda Saheb of Arcot and later by Pratap Singh of Thanjavur. On 14 February 1739 Golard took possession of Karaikal and some surrounding villages. On the West Coast too a policy of extension was attempted. In December 1739, the French flag was hoisted at Tanur and in January 1740, they attempted to settle at Chettuvai but the Zamorin would not consent.⁴³ Invitations from the Rajah of Travancore to settle at Kolachel were also received. But the matter was not pursued when it became evident that the Rajah's main interest was to obtain help against the Dutch.⁴⁴ The Ikkeri or Bednur Rajahs who became independent following the break-up of the Vijayanagar Empire started moving into Malabar from 1732 onwards and the Chirakkal Rajah's territories were threatened. On 25 March 1740, the French at Mahe signed a treaty with Soorappaya, the Kannada military chief of Bednur, accepting the gift of Ezhimalai along with Ramanthali and thus ranged themselves against the Chirakkal Rajah. But Ezhimalai was not occupied because of the hostilities with the Iruvalinad Nambiars (French records refer to them as the

'Quatre Nambiar'). From September 1739 to December 1740 the French were at war with the Nambiar and from June 1740 to October 1741 they were fighting against the Vazhunnavar. La Bourdonnais, whom Dumas had called to Pondicherry in the face of Maratha threats was asked to proceed to Mahe and his military operations brought the hostilities to a close. Under an agreement signed with the English at Tellicherry in December 1741 the French agreed to demolish their fortifications at Peringattur, Kannamala, Puythara, Chembra, Bhilayi and Mylath in exchange for an equal number of English forts demolished by the English; 45 agreements were also signed with Kadathanad and the Iruvalinad Nambiar but by them Dumas had given up office. 46

The tenacity and tactfulness of Dumas were exhibited strikingly during the threatened Maratha invasion in the last months of his governorship. In 1736, Nawab Dost Ali Khan of Arcot had permitted his son Safdar Ali and his son-in-law Chanda Saheb to conquer Tiruchchirapalli from a Hindu princess. They had proceeded to occupy Madurai after which they mounted an attack on Thanjavur. The Marathas in Thanjavur fought back valiantly inflicting surprisingly heavy losses on the Arcot forces. In January 1740, Fateh Singh and Raghoji Bhonslay with a large cavalry of Marathas marched into the Carnatic in response to appeals from the ruler of Thanjavur. They were secretly encouraged by Nazir Jung, the son of Nizam-ul-Mulk who wanted to keep them out of the Deccan; they had no anxiety of the Mugal Emperor because Nadir Shah had sacked Delhi and shaken the empire to its foundations. Their movements took Dost Ali by surprise; at the battle of Damalcheri in North Arcot he was defeated and slain on 20 May 1740. The collapse of Arcot created such a veritable confusion that fugitives flowed into Pondicherry, among them the widow, daughter and grand children of Dost Ali. Dumas could not refuse asylum to them even knowing that it would attract Maratha reprisal against Pondicherry. Safdar Ali and Chanda Saheb came to Pondicherry on 1 September 1740 to visit their begums and on this occasion the villages of Archivak (Abhishekapakkam) and Tedouvanattam (Theduvanatham) and Valudavur were gifted to Pondicherry by them. In the meanwhile however, Gratien Golard was replaced by Febrier in Karaikal in February 1741. Relations with the Thanjavur court became strained at this time but Febrier managed to exchange "Codague, Kenouchoutalam and Mattakudi" for Pudutturai, Kovilpattu, Vadamarakadu, Kil Kasakkudi and Talatteruvu.

In other developments, 5000 Maratha horsemen invested Wandiwash (Vandavasi) and Gingee in December 1740; on Christmas Day the Dutch establishment at Parangipettai was looted and pillaged. The next turn was that of Pondicherry and Dumas was prepared for the worst. Raghoji Bhonslay's letters to

Dumas of 20 January 1741 and 15 February 1741 indicate the intimidatory tactics of the Marathas but Dumas stood firm and refused to accede to any of their demands, neither to the surrender of the begums and their treasure nor to the payment of *chauth*. In the last days of April 1741, Raghoji Bhonslay left the environs of Pondicherry without carrying out his threats and without winning his demands. In recognition of this achievement, a *firman* was issued by the Mughal Emperor through Nizam-ul-Mulk conferring upon Dumas the status of Nawab and the title of Mansabdar of 4500 horses.

The translated version of the Mughal Emperor's *firman* was sent by the **Conseil Supérieur** to the Directors in January 1742. Abbé Guyon has reproduced it in his work on the history of India which he published in France in 1744.⁴⁷ The document makes it incontestable that Dumas was the first French Nawab of Pondicherry.

Dumas laid down office on 16 October 1741 and retired to France where he functioned as a Director of the French India Company from March 1743 till his death in October 1746. He died childless but left behind a fabulous fortune, the inventory of which began in November 1746 and was completed only in February 1747. The magic wand that transformed the little known bastard of Benoit Dulivier into opulence was his colonial career.⁴⁸ Private trading including trade in slaves, money-lending at exorbitant rates of interest, lending money even to the Company, acceptance of bribes and accommodation through corruption were all sources of income for the French colonial factors. Not for nothing did the word Nawab come to mean 'a deputy or Governor under the Mughal Emperor; a European who had enriched himself in the East'.⁴⁹ Truly, Pierre Benoit Dumas was the first French Nawab.

Dupleix (1742-1754):

Joseph François Dupleix took office as President of the **Conseil Supérieur** and as Governor of Pondicherry Town and Fort on 14 January 1742* and promptly wrote the Directors that he had accepted at Chandernagore itself the status of Mansabdar accorded by the Mughal Emperor to the Governors of Pondicherry. ** 50

* Between 16 October 1741 and 14 January 1742 Legou was in charge.

** A private diary written in Tamil and maintained over the years from 1736 to 1760 by Anandarangapillai who was the Dubash of the Company almost throughout the time of Dupleix came to light in 1846. The music, dance and gun salute arranged in connection with the arrival and reception of Dupleix is described in detail in the Diary indicating that Dupleix was keen to flaunt his status as Nawab.

Born on 1 January 1697 as the second son of a wholesale tobacco licensee of the French India Company, Dupleix arrived in Pondicherry on 16 August 1722 with an order appointing him **Premier Conseiller** and **Commissaire Général des troupes** which created quite a storm among the factors at Pondicherry. Their opposition led to the cancellation of the orders and Dupleix had to be satisfied with the post of a Junior **Conseiller** at Machilipatnam.⁵¹ Soon after he left for China on a commercial voyage of the Company. After his return, he functioned for seven years as **Conseiller** at Pondicherry till 1731 when he was posted to Chandernagore as Director.⁵² He joined his new office at Chandernagore on 28 August 1731.*

The settlement was administered by a **Directeur** who had a **Conseil d'Administration** composed of five members to assist him with responsibility for such French loges as Kasim Bazaar (near Murshidabad), Patna in Bihar and Balasore on the Orissa Coast. On 22 May 1718, d'Hardancourt had obtained a *firman* from Emperor Aurangzeb confirming the French in Chandernagore.** But the town had made little headway till 1731. Dupleix took measures as soon as he reached Chandernagore to regularise the revenues; he farmed out all taxes of the settlement both from the town and the villages around to an Indian courtier of the Company on a permanent basis, which produced a noticeable financial improvement.⁵³ He extended the trade of Chandernagore with new credit arrangements and even developed it as a ship-building centre. He negotiated the acquisition of Gondolpara immediately to the south and proceeded to construct **Fort d'Orléans** with moats all around, connected on the north and south with the river Hooghly, which gave protection to the population when the country all around was in the grip of a civil war between Sadfar Khan and Mirza Muhammed Ali (who later became famous as Ali Vardhi Khan).

* Chandernagore was for quite a long time referred to as 'Oughly' in French Company records because the first French loge on the Ganga was at Hooghly set up by Bourreau Deslandes in 1673. In 1688 Aurangzeb gave the French Company some concessions over the territory south of the French loge at Hooghly and it was there that Chandernagore developed.

** Labat succeeded d'Hardancourt as **Directeur** holding office till 1721 and he was succeeded by Boisrolland (1721-1726), Blanchetière (1726-1729) and Dirois (1729-1731).

During his ten years as **Directeur**, Dupleix had built up a vast personal fortune through private trade. He married Jeanne Vincens, a widow, on 17 April 1741 at Chandernagore.* Madame Dupleix assisted her husband in commerce and political life because of her ability to converse in French, English, Portuguese, Bengali, Tamil and Hindustani.**

Pondicherry then formed part of the pargana of Villianur which was within the jurisdiction of the Qiladar of Valudavur who at this time was Mir Azad. He was also the Diwan of Safdar Ali, the Nawab of Arcot after Dost Ali's death in the Damalcheri battle. The Nawab of Arcot owed allegiance to Nizam-ul-Mulk who in turn owed allegiance to the Mughal Emperor. The French were involved in a minor skirmish on 29 August 1742 with Mir Azad; the pretext was an alleged insult by Mir Azad to the head of the local police force of Pondicherry. Mir Azad's soldiers marched into Archivak (Abhishekapakkam) and tried to hoist their flag there and then they occupied Alankuppam which belonged to Dubash Anandaranga pillai. 54 In retaliation Dupleix issued orders expelling the officials of Mir Azad, the customs officers and Collectors out of Pondicherry. 55 Hostilities continued

* Dupleix was almost a member of the widow's family even before the marriage. Joseph Dupleix and Jacques Vincens were not only members of the **Conseil Supérieur** at Pondicherry but were also partners in private trade. Jacques Vincens married Jeanne, the second daughter of Albert, a French physician in the service of the Company at Pondicherry who was married to an illiterate Franco-Indian. Jeanne was only 13½ years old when she married Vincens; she bore him eleven children of whom six survived. In 1733 Jacques Vincens and his family shifted to Chandernagore upon the invitation of Dupleix but in 1737 Jacques Vincens died leaving his widow and six children to the protection of their family friend. A longstanding clandestine admiration was publicly confessed when the marriage of Joseph Dupleix and Madame Jeanne Vincens took place.

** Anandarangapillai who was an admirer of Dupleix had little good to say of her; it has been suggested that Pillai's oriental distaste for enfranchised women was at the back of his allergy for Madame Dupleix but the fact was that she was corrupt and was "like a Hindu Goddess with a multitude of hands ready to receive offerings". She was besides an orthodox Catholic always under the influence of the Jesuits, only too willing to be used against Anandarangapillai and the "idolators".

throughout September 1742 which was followed by a brief spell of peace. Safdar Ali, the Nawab of Arcot, accompanied by his Diwan Mir Azad, called on Murtaz Ali, the Qiladar of Vellore, who was his brother-in-law, and pressed him to pay his revenue dues but on 13 October 1742, the Nawab was murdered at the instance of Murtaz Ali and Mir Azad found himself in prison. 56 The minor war reached a lull but then the succession to Arcot was in open dispute.

A young son of Safdar Ali, aged five years, was crowned Nawab of Arcot with the title of Sayyid Muhammed Khan. The Coronation took place in Madras on 3 January 1742 57 because the prince and his mother were taken there by Safdar Ali before his fateful trip to Vellore. It was at this stage, in February 1743, that the aged Nizam-ul-Mulk, then in his 72nd year, moved into the Carnatic accompanied by his son Nazir Jung to drive out the Marathas from Tiruchchirapalli and to restore peace in the region by investing a new Nawab in Arcot. He set aside Sayyid Muhammed Khan and nominated Kwaja Abdulla Khan who was expected to appoint Mir Azad as Diwan. 58 Nizam-ul-Mulk also made it known that Sayyid Muhammed Khan would become the Nawab upon his attaining manhood; he entrusted the young prince to the care and guidance of Anwaruddin before leaving for Hyderabad at the end of March 1744. Dupleix did not feel entirely reassured as long as the Nizam remained in the Carnatic; he began to take precautionary measures; the services were ordered to be in readiness and the Europeans were ordered to enlist in the army; the fort was placed on the alert. 59

Even before Nizam-ul-Mulk had left the Carnatic for Hyderabad, his nominee Khwaja Abdulla Khan died and the Nizam had to appoint a new Nawab. His choice now fell on Anwaruddin, one of his dependent generals, whom Dupleix had to accept as Nawab of Arcot.

In his letter to the Directors of the Company 60 on 2 December 1744, Dupleix explicitly stated that Anwaruddin was the legal Nawab of Arcot and that Chanda Saheb was plotting against him with Murtaz Ali of Vellore who had hired Pathan assassins to do away with the young son of Safdar Ali, Sayyid Muhammed Khan. 61 But even as this letter was being written to France, Dupleix was conspiring with Chanda Saheb who was a prisoner of the Marathas at the time.

News of the outbreak of the Austrian Succession War in Europe (1742-1748) reached India on 16 September 1744. Dupleix's first reaction was not to allow an Anglo-French conflict to divert him from his schemes on the Carnatic and he therefore suggested neutrality between the British and the French in India. 62 The proposal was rejected since the British had an advantage in the Indian Ocean

with a fleet under Commodore Barnet while the French had none. In February 1745, the French ship '*Favori*' was seized by Commodore Peyton at Sumatra. Besides a large number of vessels in which Dupleix had invested were also seized by the British. Anwaruddin appealed to the French as well as the English not to enter into hostilities in the region. The English factors immediately took this letter to mean that Anwaruddin was sympathetic to the French because Anwaruddin was asking for what the French had asked for originally. Indeed Anwaruddin favoured the French at this time for he visited Pondicherry after declining an invitation to Madras. Dupleix received Anwaruddin at Pondicherry on 17 September 1745⁶³ and in his discussions with him undertook to capture Madras from the English for the Nawab.⁶⁴ The agreement arrived at with Anwaruddin was kept back even from Mahe de La Bourdonnais as well as from the Company Directors till 21 September 1746 when he wrote a letter to La Bourdonnais stating that he had that day received a demand for the handing over of Madras to the Nawab and had agreed to it.⁶⁵ Actually, the letters exchanged by Dupleix and the Nawab between 19 September and 21 September did not mention anything about the transfer of Madras to the Nawab after its capture.⁶⁶

The seizure of Madras was suggested by La Bourdonnais in 1742, before Dupleix arrived at Pondicherry. Soon after Dupleix became Governor, Paradis who was an able Swiss engineer, had gone to Madras secretly to study the condition of Fort St. George. La Bourdonnais arrived in Pondicherry on 8 July 1746 from Port Louis in Bourbon with an improvised squadron after an indecisive action on 25 June against Peyton but it was only a month later that he moved against Madras. On 21 September 1746, Madras meekly surrendered to La Bourdonnais after a simple six-day siege during which two Englishmen and four others died of bullet wounds.⁶⁷ There was great rejoicing in Pondicherry when Madras fell: church-bells pealed, cannons boomed, betel and sugar-candy were distributed to the population. La Bourdonnais was interested in the neat pile that he could personally make for the ransom of the fort; a sum of 10,00,000 pagodas was privately offered to him as ransom by the English factor Morse.⁶⁸ Dupleix was interested in capturing Madras and offering it to the Nawab in exchange for Villianur which he desired to have as his Jagir.⁶⁹ The cross-purposes of the two comrades-in-arms tempted them to double-cross each other and to waste a lot of words in an attempt to justify their selfish conduct in the name of the King and the country.⁷⁰ In spite of Dupleix's letters to La Bourdonnais that the town had been promised to the Nawab of Arcot, La Bourdonnais concluded a ransom treaty on 21 October 1746 with the Madras Council by which he netted 85,000 pagodas in gold, silver and diamonds.⁷¹ La Bourdonnais was forced to quit the Coromandel Coast on

13 October 1746 because of a hurricane that crippled his ships. Dupleix lost no time to revoke the treaty of ransom; under his direction the **Conseil Supérieur** decided to retain Madras under the occupation of the Company and to set up a **Conseil Provincial** at Madras with Barthélemy as **Commandant** and Boyelleau as **Secrétaire**. Morse, the English Agent at Madras and his family were brought to Pondicherry as prisoners. Dupleix did attempt to proceed against La Bourdonnais with criminal charges in which La Villebague, the brother of La Bourdonnais, was the first accused; as for La Bourdonnais, he found himself under arrest and in jail as soon as he reached France.⁷²

Anwaruddin waited for a whole month in the hope that Madras would be handed over to him, for on 26 September 1746, Dupleix had assured him "**Nous n'y sommes que pour peu de temps**".⁷³ Mahfuz Khan, the eldest son of Anwaruddin who had visited Pondicherry in February 1746⁷⁴ became impatient of the delay in the implementation of the promise and threatened to act against the French. On 27 October 1746,⁷⁵ Gosse and Kerjean were sent as envoys from the **Conseil Provincial** of Madras to Mahfuz Khan but they were detained as prisoners. In full battle array, Mahfuz Khan and 10,000 soldiers reached Madras and started a blockade; they were immediately engaged in a spirited sally by 3000 men led by La Tour which pushed Mahfuz Khan south to San Thome.⁷⁵ Paradis with a force of 200 Frenchmen and 300 sepoys marched up from Pondicherry but Mahfuz Khan thought that he could be halted at Adyar on the southern bank of the river. On 4 November 1746 Paradis charged his opponents only to find Mahfuz Khan and the 10,000 strong army of Arcot in headlong flight.

Dupleix received a conciliatory gesture when Hussain Tahir, his old-time ally in Arcot and now a courtier of Anwaruddin⁷⁶ informed him that Gosse and Kerjean had been released by Mahfuz Khan and that Dupleix should on his part keep his word and hand over Madras to the Nawab. The intriguing idea then occurred to Dupleix that he could capture Fort St. David or Cuddalore and present it to the Nawab to assuage his disappointment over Madras. He accordingly wrote to Hussain Tahir and started his campaign against Fort St. David.⁷⁷

Four different attempts were made by Dupleix on Fort St. David. On 19 December 1746, 1700 French soldiers under de Bury initiated the attack but they were surprised and put to flight at Manjakuppam by an Arcot force of 6000 horses sent to help the English. Mahfuz Khan had combined forces with his younger brother Muhammed Ali after having "readily engaged to send his army to Fort.

St. David on condition that the English would furnish part of the expense".⁷⁸ On 10 January 1747, Dupleix staged an attack by sea with 500 men embarked on boats but it turned out to be an utter failure. Dupleix then attempted to divert the Nawab's troops by ordering a campaign of military ravage⁷⁹ and incited the Polygars (Palayakars) of Vettavalam and Alattur by sending them arms and money to "invade and burn . . . attack and destroy".⁸⁰ The campaign of ravage compelled the Nawab to cease his involvement in the hostilities. On 15 February 1747 Dupleix invited Mahfuz Khan to Pondicherry.⁸¹ An agreement was initialled at Pondicherry on 19 February 1747 by which the Nawab agreed to withdraw his troops from the English side in return for the symbolic surrender of Madras to the Nawab to be signified by flying the Nawab's flag on Fort St. George for eight consecutive days.

Dupleix celebrated the peace by holding a Durbar at Pondicherry on 27 February 1747, at which European and Indian residents of Pondicherry were encouraged to present Dupleix with gold mohurs as 'Nazar Salami' to the Nawab.* At the Durbar, Dupleix sported a turban bedecked with pearls and precious stones. Five days after the Durbar, a messenger from the Mughal Emperor at Delhi arrived in Pondicherry conferring on Dupleix the title of Khan Bahadur.⁸² Madame Jeanne Dupleix consequently became Johanna Begum.

Dupleix's third attempt on Fort St. David was entrusted to Paradis; he had started the attack when the arrival of an English fleet at Cuddalore on 14 March 1747 forced him to fall back. The last attempt by Dupleix on Fort St. David on 27 June 1748 was also a sad failure.

At no time did Dupleix exhibit his innate reserves of inspired leadership to fuller advantage than during the dangerous days of August-September 1748 when an English siege by sea and land balanced the fate of Pondicherry on a razor's edge. Admiral Boscawen's squadron of 26 ships, five of which were Dutch, arrived in Coromandel waters in late July 1748. Together with the ships of Griffin's Squadron, Boscawen's force formed a powerful marine force. In all 3720 Europeans, 2000 sepoys and 150 artillery pieces were at his disposal and "every person attached to the English cause who beheld this formidable force was elated with joy from expectation of its success; and no one doubted that the loss of Madras would be revenged by the capture of Pondicherry."⁸³ The town was only 70 yards from the seashore;

* The list of donors is given in full by Anandarangapillai in his Diary, Vol. IV, pp. 388-389.

its extent was a little more than a mile from north to south and about 1100 yards east-west; it was fortified on three sides to the land by walls and ramparts flanked by eleven bastions and two half-bastions; these were surrounded by a ditch and an imperfect earthen mound. The eastern side was defended by several low batteries capable of mounting 100 pieces of cannon. ⁸⁴ Dupleix completed the fortifications on the seashore; the four gates of Cuddalore, Villiyanur, Valudavur and Madras were secured with redoubts; the area for a mile between the moat and the limits of the possession was hedged in with cactus and aloes intermixed with palm-trees. He correctly anticipated the first attack from the south and therefore at Ariyankuppam he set up a small fortified prominence with gun emplacements.

The attack began on 23 August 1748 with Major Goodere leading 700 men against the Ariyankuppam fortification; Paradis who was in charge of the defence at the spot inflicted heavy losses on the enemy; Major Goodere lost his life and Major Stringer Lawrence was captured prisoner. Five days later, an accidental hit blew up an ammunition dump inside Ariyankuppam and nearly a hundred Frenchmen were killed or wounded. The French withdrew from Ariyankuppam after this disaster. On 28 August 1748, the English infantry took possession of Ozhukarai in the south-west; they then approached the walls from the north-west and started the siege on 6 September 1748. The citadel was bombarded day and night; Paradis who led a sortie alongwith 500 Europeans and 700 sipahis (sepoys) was mortally wounded alongwith seven other officers and 100 French soldiers. But the defiance of Dupleix continued. The French reply was so effective and accurate that the ships in the operation dared not come within firing range in the day time. In spite of every effort both from land and sea, Boscawen could not reduce Pondicherry; he raised the siege on 17 October 1748 after running it for 40 days. The French lost 393 killed, but the English losses were much higher; they had lost 1065 men in all. ⁸⁵ Dupleix for once was magnificent in defence, sanguine in adversity and defiant in debacle.

Pondicherry celebrated its deliverance with the ringing of church bells, cannonades, *Te Deum* in the churches, parades and feasts. In mid-November news circulated in Pondicherry that the Austrian Succession War had ended on 18 September 1748 with the Treaty of Aix-la-Chapelle but it was only in January 1749 that official communication reached Pondicherry. Madras was exchanged not for Valudavur and Villiyanur as Dupleix had planned but for Cape Breton Island and Louisbourg in North America. Madras reverted to the English.

Nevertheless, Dupleix did not seek peace in the Carnatic for he discerned even early in 1748 signs of the gathering storm. On 5 June 1748 Dupleix learnt through Anandarangapillai of the death of Muhammed Shah, the Mughal Emperor and a fortnight later came news that Chanda Saheb had been set at liberty by the Marathas who were mobilising troops to invade the Carnatic. Shortly after came the news that Nizam-ul-Mulk had died and that Murtaz Ali and Mir Azad were preparing to rebel against Anwaruddin of Arcot.

Chanda Saheb left Satara in the beginning of 1748 when the Marathas agreed to a ransom of Rupees 7,00,000 guaranteed by Dupleix. They also provided him with 3000 men. "It is Dupleix who has secured my liberation by reducing from ten to two the number of lakhs of rupees" according to Chanda Saheb.⁸⁶ He reached the western confines of the Carnatic in July 1748; soon after Dupleix learnt from a letter sent by Hussain Tahir of Vandavasi that Chanda Saheb had crossed the Krishna with seven thousand Marathas. On 24 August 1748, Dupleix received a letter from Chanda Saheb written from Bankapuram, the capital of the Nawab of Savanur, informing Dupleix that he would soon cross the Tungabhadra to reach Adoni and meet Musafar Jung.⁸⁷

Musafar Jung was the title assumed by Hidayat Mohiudeen, son of Nizam-ul-Mulk's favourite daughter; he claimed that his grandfather had vested the succession on him and that the new Emperor Ahmed Shah had conferred on him the title of Musafar Jung. But his uncle, Nazir Jung, the second son of Nizam-ul-Mulk was by the side of his aged father at the time of death and had seized the vast treasure and fortune which the Nizam-ul-Mulk had with great miserliness and craft amassed during his long life. Nazir Jung claimed that the Emperor Ahmed Shah had confirmed his elder brother Ghazi-ud-din as the Nizam but that it had been since ceded to him. Musafar Jung had a small army of 25,000 with which he ruled Adoni and surroundings but he was looking forward to some stroke of luck which could take him to Hyderabad. Chanda Saheb's stay in Adoni had immediate results; an alliance with Musafar Jung was sealed. But the friends were not ready to march into the Carnatic without a signal from Dupleix. Dupleix was continuing negotiations with Nazir Jung over the exchange of Madras for the Jagir of Valudavur and Villianur. When news of the Peace of Aix-la-Chapelle reached Dupleix in November 1748, Madras was no longer available for an exchange; instead he threatened Nazir Jung with war; "If you do not give me the Jagir which I am asking for, I will take it by force of arms."⁸⁸ This was a patent excuse for brazen involvement in a civil war fomented with his own intrigues.

Four hundred European soldiers and 1000 sepoy under Abdul Rahman*, the whole force commanded by d'Auteuil, set out from Pondicherry on 15 July 1749 to join forces with Chanda Saheb and Musafar Jung who had moved into the Carnatic and camped at Pallikonda waiting for the French. Anwaruddin had marched out of Arcot to halt the invaders after writing to Dupleix reproaching him for his support to Chanda Saheb and offering him the same advantages promised by Chanda Saheb.⁸⁹ At first Anwaruddin marched in pursuit of his enemies but when he learnt that the French had joined them, he looked for a fortified retreat to defend himself and chose Ambur, fifty miles west of Arcot and thirty to the south of Damalcheri Pass. The fort of Ambur is built on the summit of a mountain between which and a large lake at some distance from it, lies one of the principal passes leading into the Carnatic. On 3 August 1749, d'Auteuil attacked Anwaruddin without support from Chanda Saheb or Musafar Jung. In the final assault directed by Bussy, the French won the day. Anwaruddin died on the field of battle; Mahfuz Khan was captured prisoner; the youngest son Muhammed Ali fled to Tiruchohirapalli; d'Auteuil's losses at Ambur were six French soldiers killed. After Ambur, Chanda Saheb and Musafar Jung entered Arcot without opposition. Musafar Jung assumed here the status of the Nizam and his first action was to proclaim Chanda Saheb as Nawab of Arcot.

Musafar Jung was received with great pomp and fanfare at Pondicherry on 30 September 1749. Two days earlier Chanda Saheb had also been received with ostentatious ceremony and high respect. They partitioned the Carnatic; Villianur and Bahur for the French Company, Kovalam for Dupleix, Parangipettai for Madame Dupleix, Alambavai for d'Auteuil, San Thome for Noronha, who was Madame Dupleix's cousin and Chengalpattu for Anandarangapillai.⁹⁰ But it was not as easy as all that. Admiral Boscawen who was at Madras after its restoration took possession of San Thome for the English Company and Noronha who had been sent by Dupleix from Pondicherry was banished to Europe.

The Austrian Succession War had little effect at first on Mahe but by 1746 it became noticeable that the French had stopped the purchase and export of pepper because of their heavy losses at sea. On 17 July 1746, two ships came into the Mahe roadstead, one of which was an English ship captured off Mozambique. The news of La Bourdonnais and his fleet which reached Mahe on 20 July persuaded them to make warlike preparations. They enlisted 1500 Mappilas and maintained

* One of the two brothers who commanded the Mahe sipahis.

close contact with Ali Raja of Arakkal (Cannanore) who was their only dependable ally on the coast against the English. Ali Raja visited Mahe with a retinue of 500 men when La Bourdonnais arrived in Mahe after the capture of Madras; he was in Mahe between 27 February 1747 and 1 March 1747. He was however sorely dejected when La Bourdonnais sailed away without attacking Tellicherry. In mid-September 1747, four French ships arrived at Mahe bringing with them two captured English vessels but on 29 March 1748 the English ships broke free and sailed away to Tellicherry from where they returned fully victualled to attack the French ships lying in the Mahe roadstead. However on 24 September 1749, when the proclamation of peace was officially received, the French factors met the English at Tellicherry and celebrated the peace.

In Chandernagore, the factors spent years of anxiety due to unsettled political conditions. Maratha depredations had begun in 1742. Dirois sent Waquils or emissaries to express goodwill or 'salami' to the Maratha general and the Marathas appeared satisfied with French neutrality but the Nawab was asking for European help and demanded that the three French loges in Kasim Bazaar be linked together with a defence line and be handed over to his family. The Marathas ravaged the countryside around Chandernagore in April 1747; they repeated their performance in February 1748, in November 1748 and in April 1749; many took refuge in the French settlement. The English compound inside Chandernagore was taken possession of by the French "by force of arms" at the end of 1748; this formed part of the campaign in Bengal by the French for the Austrian Succession War.*

In Karaikal Febrier died in an accidental explosion on 11 June 1744. He was succeeded by Paradis who held the post till 1746. Throughout this time, Karaikal was at war with Thanjavur and although Paradis tried his utmost to make peace and gain time, he failed. During the Carnatic battles of 1742-1754, Karaikal faced an anxious period for Thanjavur was the scene of many marches not only by the English but also by Chanda Saheb and the Marathas. The English fort of Devakottai at the mouth of the Coleroon was a constant menace.

* The establishments in Bengal at the time included Balasore, Kasim Bazaar, Chinsura, Dacca and also Patna in Bihar. Dirois took charge as Director and Commandant Général of the French establishments in Bengal on 14 March 1742; he made way for Duval de Leyrit on 9 September 1747. (Gaudart Catalogue de Manuscrits, Vol. III-No. 2321, 2323).

Dupleix had insisted repeatedly on the immediate necessity of attacking Muhammed Ali at Tiruchchirapalli but early in November 1749, both Chanda Saheb and Musafar Jung accompanied by a French force of 800 soldiers, chose to march against Pratap Singh of Thanjavur. Chanda Saheb was keen to collect some treasure quickly to meet his growing military expenses and he avoided a siege of Tiruchchirapalli knowing that it would be prolonged indefinitely. He turned towards Thanjavur with the confidence of a quick enrichment. On the first of January 1750, Pratap Singh accepted a treaty which stipulated the payment of 70 lakhs of rupees to Chanda Saheb and two lakhs to the French troops; the treaty likewise ceded to the French Company 81 villages around Karaikal where the French Company had already built a fort in 1739 and dispensed the payment of Rs. 7,000 per annum to the Thanjavur king by the French. Le Riche was the Commandant in Karaikal when Chanda Saheb confirmed the grant of 81 villages around Karaikal. Chanda Saheb's *firman* was ratified by the Rajah of Thanjavur on 31 December 1749.

At this stage when Chanda Saheb, Musafar Jung and the French troop Commandant Duquesne were evaluating the precious stones and jewels, the gold coins and plates that Pratap Singh had offered towards the amounts he was due to pay, news came that Nazir Jung had entered the Carnatic with a large army to restore order.

When the battle of Ambur was being fought, Nazir Jung was leading his army to his northern frontiers for he felt that his elder brother Ghazi-ud-din was the real threat to his position. But the news of Ambur changed everything; his nephew was no longer a chimerical adventurer but a formidable rival and he therefore turned away from his campaign in the north and prepared to come into the south. The English at Madras had also by this time decided to lend their support to Muhammed Ali and although they allowed Boscawen's fleet to sail back home, they despatched 120 Europeans under Captain Cope to the aid of Muhammed Ali in Tiruchchirapalli. Muhammed Ali asserted that both Musafar Jung and Chanda Saheb were rebels to the Empire; that Nazir Jung was the Nizam appointed by the Emperor and that he himself was the Nawab of Arcot.

By 15 March 1750, Nazir Jung had reached Villupuram; he had 3,00,000 fighting men, half of which was cavalry, 800 pieces of cannon and 1,300 elephants. He was joined by an English force under Major Stringer Lawrence. He then moved into Villiyanur where Chanda Saheb and Musafar Jung had encamped. Dupleix sent 2,000 European soldiers under the command of d'Auteuil to join Chanda Saheb and Musafar Jung. The French camp was set up at Cumbla-Mattur between Villupuram and Gingee.

An unnerving act of indiscipline took place in the French camp at this stage; 13 out of 23 officers of the French force refused to serve under d'Auteuil. The news reached Dupleix on 1 April 1750 and he immediately sent de Bury to bring the officers to reason but he failed. On 5 April all the 13 officers deserted the Mattur camp, whereupon d'Auteuil took the decision to retreat at once to Pondicherry. Chanda Saheb tried to persuade d'Auteuil to abandon the idea of retreat but having failed, joined d'Auteuil and brought his army also into the French establishment. Musafar Jung would not retreat but neither did he have the guts to fight. He surrendered to his uncle Nazir Jung, who having made him a prisoner, could now denounce Chanda Saheb as a usurper.

It was a moment of set-back and debacle but Dupleix was not one to be unnerved. On 12 April 1750 he went to Muttiyalupettai to meet the officers and troops that had retreated and roused them all over. He then sent Delarche and de Bausset to negotiate peace with Nazir Jung and they remained in Valudavur from 18 April 1750 to 23 April during which period they won over Nazir Jung's Diwan, Shah Nawaz Khan and Ramadas Pandit, his Peshkar to the French side. On the night of 30 April, 300 soldiers under the command of La Touche launched a night attack on the Valudavur camp of Nazir Jung, surprised the enemy utterly and caused a regular carnage, compelling Nazir Jung to break camp and fall back on Arcot. The English forces under Captain Cope and Major Lawrence withdrew to Fort St. David having failed to obtain a *firman* from Nazir Jung confirming the grant of Poonamallee, Mylapore and Devanampatnam which they had been trying for. On 5 May 1750, Dupleix reoccupied Villiyanur and Bahur.

From Arcot, Nazir Jung issued orders that the French possessions in Machilipatnam and Yanam be seized and the orders were carried out by his officers. As a retaliatory measure, Dupleix despatched a detachment of 200 Europeans and 300 sepoys by sea to attack Machilipatnam. The French detachment seized the port by surprise at night and captured it with negligible loss. Another force of 100 horsemen and 300 sepoys commanded by Sheik Ibrahim captured Villupuram on 13 June 1750 and the next day, Sheik Hussain with 200 horses and 200 men carried Tiruvadi by assault. By the start of July 1750, the French were in possession of Chengalpattu, Elavanasur, Panruti and Bhuvanagiri. On 15 July 1750, English forces under Captain Cope, marching out of Fort St. David to effect a junction with Muhammed Ali were involved in a minor engagement at Maligamedu. Misunderstandings between Muhammed Ali and Captain Cope, cleverly instigated by Dupleix caused the English to return to Cuddalore on 27 August 1750. The French forces then fell upon Muhammed Ali between Kumaramangalam and

Kavarapattu; it was a rout, the Nawab himself escaping with great difficulty towards Tirukkoyilur. Dupleix then ordered d'Auteuil to march upon Arcot. Midway between Tiruvadi and Arcot lay the fort of Gingee, known as one of the redoubtable fortresses of the Carnatic. Flanked with strong walls extending over three miles, linking three steep and craggy hills, Gingee was a formidable proposition but d'Auteuil's second-in-command, Bussy exhibited qualities of a great commander by reducing it in the matter of one night.

Dupleix had been fishing for traitors in Nazir Jung's camp right from the moment it was set up in the Carnatic. The Diwan Shah Nawaz Khan, the Sardar of Cuddappah Abdul Nabi Khan, the Sardar of Karnool Muhammed Khan and the Sardar of Savanur Abdul Majid Khan had already entered into a conspiracy against Nazir Jung; the Maratha Generals Ramachandra Rao and Janoji Nimbalkar were also involved. When the French forces under La Touche attacked Nazir Jung near Desur on 15 December 1750, not only did the Marathas and the Nawabs of Cuddappah and Savanur betray Nazir Jung but they kept their armies astride Desur and Vellimedu to prevent Muhammed Ali at Desur coming to Nazir Jung's help. Muhammed Khan of Karnool was challenged on the field of battle by Nazir Jung for his betrayal but the Khan's reply was to shoot his overlord to death. Dupleix struck medals to commemorate his victory at Vellimedu⁹¹ and planned a new township on the field of victory which he named Dupleix-Fateabad.⁹² With the severed head of Nazir Jung in tow, Muhammed Khan rode to free Musafar Jung and to present him with his uncle's head as a trophy of treason. A new Nizam who had for seven months been in the captivity of the old came to power. He was the creation of Dupleix and held his new post with the support of French bayonets.

Musafar Jung was received with protocol at Pondicherry on 26 December 1750 and the day after came the Nawabs of Cuddappah, Karnool and Savanur. The French Company was confirmed in the possession of Villiyanur and Bahur, of 81 villages in Karaikal and of the town of Machilipatnam with its dependencies including the island of Divi. Dupleix was offered the governorship of all the lands south of the Krishna but he declined it in the open *durbar* in favour of Chanda Saheb and preferred the rank of Mansabdar of 7,000 horses.

Musafar Jung would not trust his person to any but the French for he knew that his Pathan Nawabs were discontented nor was he confident of maintaining himself in Hyderabad by his own means. He therefore requested Dupleix to spare him a French force to which Dupleix readily agreed, for it would give him control over half of India. Dupleix knew that Muhammed Ali, the youngest son of

Anwaruddin had escaped from Vellimedu to Tiruchchirapalli and that he was a threat to the position of Chanda Saheb. The best insurance against Muhammed Ali was the control of the Nizam. Muhammed Ali had already made overtures to the Nizam and had offered to relinquish Tiruchchirapalli and his claim on Arcot if he could be given some other part of the Carnatic.⁹³ Dupleix could therefore agree to spare Bussy with a force of 300 Europeans and 2,000 sepoys and ten artillery pieces.

Musafar Jung started his march to Hyderabad from Pondicherry on 7 January 1751; Bussy joined him two days later. When the armies reached Cuddappah, the three Pathan Nawabs raised the standard of revolt and attacked the rear echelons. Disgruntled even at Pondicherry, they had asked for large territories and greater indemnities but Dupleix's attitude had quelled them for the time being. Their attack was either an attempt to seize the Nizam's treasures or a premeditated attack on his person in the understanding that Bussy would be powerless to intervene. On 14 February 1751, when Musafar Jung lost his life in battle against the three Nawabs, the cause would have been lost but for Bussy and his force who intervened in time and effectively.⁹⁴

The death of Musafar Jung made Bussy a kingmaker; he chose Salabat Jung, a younger brother of Nazir Jung and continued the march to Hyderabad. One of the first acts of the new Nizam was to add the towns of Nizampatnam, Kondavidu, Alamnava and Narasapur together with Yanam and Mafoosbundur to the French possessions in Machilipatnam. The French factory at Yanam was rebuilt for them. Bussy continued his march to Hyderabad with the new Nizam he had set up and entered Hyderabad in triumph on 14 April 1751; on 18 June, they entered Aurangabad where in the first week of July 1751, a *firman* received from Delhi permitted Salabat Jung to be solemnly invested as the Nizam, the Subadhar of the Deccan. July 1751 was the apogee of French power in India; it was Dupleix's most successful moment.

But the Carnatic wars were not over yet; Muhammed Ali in Tiruchchirapalli held out against Chanda Saheb. Dupleix despatched d'Auteuil to Tiruchchirapalli but his illness of gout made Dupleix decide to place Jacques Law de Lauriston* in charge of the operations. Law started a campaign which was neither a siege nor a blockade, and he went on marking time. But time was running out for Chanda Saheb. On 26 August 1751 Robert Clive marched from Madras with

* Elder brother of the more famous Jean Law de Lauriston.

200 English soldiers and 3000 sepoys with which he captured Arcot on 1 September 1751. Chanda Saheb detached 4,000 troops from Tiruchchirapalli and reached Arcot on 23 September 1751. His son Raza Saheb arrived at Arcot with reinforcements from Pondicherry but the siege of Arcot with Clive and his men inside the fort ended after fifty days in a victory for the English. Robert Clive pursued the besiegers to Vellore and then to Arni where he defeated the French and Raza Saheb in the last week of November 1751. Clive also marched to Kanchipuram and seized it from its French defenders before returning to Fort St. George.

Dupleix had hoped to storm Tiruchchirapalli while Arcot was being besieged, but Law was hesitant and timid. With an army of 900 Frenchmen and 2,000 sepoys alongwith 39,000 men of Chanda Saheb, he was advised by Dupleix to act boldly. Finding his advice unheeded, Dupleix began communicating commands but still Law hesitated. In November 1751, Muhammed Ali improved his position by bringing the Rajah of Mysore and a large force of Maratha cavalry under Murari Rao Ghorpade on his side. On 15 March 1752, Major Stringer Lawrence who had returned from England took command at Fort St. David of 400 Europeans and 1,100 Indian soldiers with eight field pieces which he took to Tiruchchirapalli through the friendly territory of Thanjavur. Dupleix sent repeated instructions to Law to intercept Lawrence and his force. He even sent a force of 120 Europeans and 500 sepoys to effect a junction with Law. Exact information about the movements of this reinforcement reached the English camp and the English attacked them at Valikondapuram. This battle was a shocking defeat for the French and their commander d'Auteuil was captured prisoner. Two days latter, on 13 June 1752, Jacques Law de Lauriston capitulated at Srirangam island opposite the Golden Rock Fort. Chanda Saheb had no option but to give himself up; he was beheaded by the Thanjavur General Manekji with little ceremony. Here was a triple disaster.

But Dupleix was unbending in adversity and refused to despair. In January 1753, he bought Murari Rao Ghorpade and his 2,000 Maratha horses to join the 300 French soliders whose command was given to Du Saussay. Finding Du Saussay ineffective, Maissin was placed in command. Under him Dupleix revived his hopes; Maissin invested Tiruvadi, the English post seven miles from Fort St. David. Lawrence at this time received appeals for help from Dalton at Tiruchchirapalli informing him that he was blockaded on all sides and that he had supplies only to last three weeks. Lawrence rushed to Tiruchchirapalli and his absence from Fort St. David was used by Maissin to reduce Tiruvadi and Chidambaram. This was the signal for Dupleix to proclaim a new Nawab for Arcot, Nawab Murtaz Ali of Vellore, 95

whom Dupleix himself had nearly ten years earlier denounced as the murderer of his brother-in-law, Safdar Ali and later of his nephew, the young Sayyid Muhammed Khan. Murtaz Ali began a campaign with French help to recover the forts of South and North Arcot and won some battles against Muhammed Ali.

In Tiruchchirapalli when he reached on 6 May 1753, Major Stringer Lawrence fought a French force strongly entrenched in Srirangam. Dupleix had sent this force under d'Astruc with whatever he could organise at that time in Pondicherry. But the French had too small an army to blockade Tiruchchirapalli; neither Mysore nor the Marathas under Murari Rao Ghorpade could be trusted as firm allies. In June 1753, Murari Rao Ghorpade quit the French camp though he did not positively break with the French. Nandi Raja of Mysore was unable to pay his troops and was in dire financial stress. Mainville's military campaigns in Thanjavur and Pudukkottai also brought little result since the enemy checked his action in these areas.

On 21 January 1754, peace talks were held between the French and English at Sadras.*⁹⁶ where the French were represented by Delaroché, de Bausset and Father Lavour while on the English side were Palk and Vansittart. The negotiations were broken off when the English found that Dupleix wanted the English to recognise him as a Nawab appointed by the Great Mughal.

In Mahe the brazen interference of the French and the English in the internal affairs of the neighbouring chieftains brought them into conflict and open war soon enough. In January 1750, Dorril, the English Agent at Tellicherry, embroiled himself in the affairs of the Kadathanad family and had fallen foul of the Prince Regent Kunhiraman of Kolathunad, who turned to the French at Mahe for help in his open fight against the English. The Prince Regent visited Mahe on 25 September 1750, and released to the French the forts at Nileswaram, Ramanthali and Ettikulam. The French helped the Kolathunad Regent and actively participated in attacking Tellicherry. Hostilities were brought to a close in May 1752 but the French continued at war with Bednur who was trying to seize Nileswaram and capture the northern areas of Kolathunad. In July 1754, Louet, the French *Chef* at Mahe managed to arrange a peace. The fort of Nileswaram was retained by the terms of the peace.⁹⁷

* Dupleix had written to Saunders at Madras suggesting peace talks but the reply of the Madras Governor was that talks could take place only upon Muhammed Ali being recognised as the Nawab of Arcot by the French.

In August 1754, Dupleix was halted; he was halted not by the English nor by a combination of Indian Qiladars; he was halted by the French. Pondicherry no doubt saw the peak of its glory and power during the time of Dupleix. Between 1744 and 1754, Pondicherry became the diplomatic capital of the Carnatic; for quite many years it was also the military headquarters where decisions were taken to decide the fate of Nawabs and Sarkars. Amidst the din of battles and the web of intrigues emerged the singular purpose of Dupleix: the creation of a French Empire in India by conquest. But the work and achievements of Dupleix did not last because according to Malleson, it was his misfortune to be born at a season when his country was sunk in the lowest abyss of profligacy and misgovernment. He was no doubt, "a great administrator, a diplomatist of the highest order, a splendid organiser" but has also been charged by none other than Anandarangapillai, his own Courtier, as being ruled by the will of Madame Dupleix. However, between Madame Dupleix and Anandarangapillai there was no love lost. Her opposition to the Courtier was born of her opposition to his 'pagan' religion. She was seen at her worst during the siege, when she persuaded her husband to advance the excuse of "strategic requirements" to pull down the Siva temple adjoining the Jesuit Church. In spite of his failings, it is impossible to deny to Dupleix the possession of some of the greatest qualities with which man has ever been endowed.⁹⁸ On 14 October 1754, Dupleix bade adieu to Pondicherry following his recall to France. In the words of Robert Orme, "all his countrymen concurred in thinking that his dismissal from the Government of Pondicherry was the greatest detriment that could have happened to their interests in India".^{* 99}

From Godeheu to Leyrit (1754-1758):

Godeheu arrived on 1 August 1754 with orders to supersede Dupleix. Godeheu handed over to him the royal order superseding him and recalling him to France. An order issued by Godeheu required Dupleix to submit certain clarifications and explanations. The following afternoon Godeheu took over command of the troops although Dupleix requested that it be put off by a couple of days. On 4 August 1754, he held the first meeting of the **Conseil Supérieur** at which Dupleix expressed his desire to return to France after handing over to Godeheu. After a short statement, he left the **Conseil** stating that he had

* "I have sacrificed my youth, my fortune, my life, to enrich my nation in Asia. My services are treated as fables. I am treated as the vilest of mankind. I am in the most deplorable indigence; the little property that remained to me has been seized. I am compelled to ask for decrees for delay in order not to be dragged into prison" lamented Dupleix only three days before he died. He died on 10 November 1764.

no more any place in it. Yet before his departure he advised Godeheu to despatch 300 men without delay to reinforce Mainville at Tiruchchirapalli. But what Godeheu actually did was to write to Saunders on the same day proposing an immediate cease-fire. He released the Swiss officers and men whom Dupleix had arrested two days earlier while they were proceeding from Madras to Fort St. David. Instead of reinforcing Mainville, he replaced him with Maissin.

Negotiations for a cease-fire dragged on and it was only on 5 October 1754 that the English and French deputies met midway between Pondicherry and Fort St. David to sign the agreement to cease-fire at Tiruchchirapalli. In December 1754, Godeheu initiated negotiations for a truce with Saunders to replace the cease-fire agreement and the truce terms were initialled on 26 December 1754. It came into effect on 11 January 1755 when the period of the cease-fire expired. A provisional treaty containing 11 articles, the essence of which was to place both parties on an equal footing, was signed on 11 February 1755. Both parties disavowed titles and dignities granted by the Muslim rulers and both parties undertook not to interfere in the internal affairs of the local rulers. The area of Pondicherry was to equal the area of Fort St. David and Fort St. George put together; in Thanjavur, the English were to have Devakottai and the French Karaikal; the French were to hold an area between Nizampatnam and the Gondokama River equal to the difference in area between Devakottai and Karaikal; Machilipatnam and Divy were to be neutral; but they had equal rights to function in both the places and were free to exchange one for the other. In Srikakulam, the English held Vishakhapatnam while the French were free to hold either Ganjam or Mafosfundur. "This Convention was in reality nothing more than a cessation of hostilities for 18 months..... In the meantime the French were left to enjoy without interruption the revenues of all the territories which they had acquired during the war....." As for the English the truce did not prevent them from building up their forces in India; in a few weeks they assembled four warships and two frigates with 306 cannons and 2,060 men sailing from Plymouth on 24 March 1754.

On 16 February 1755 Godeheu left for France, having reaffirmed the basic aims and objects of the Company. He could not even wait for the arrival of Duval de Leyrit,* the Governor-designate but handed over charge to a Committee of three—Barthélemy, Boileau and Guillard who functioned jointly till 8 April 1755 when Duval de Leyrit took charge as Governor. But the truce of 11 January 1755 never came into effect as war broke out between France and England in May 1755.

*He was **Chef** at Mahe when La Bourdonnais arrived with his squadron in 1741. He then functioned as President of the Chandernagore *Conseil* from 1747–1754.

Duval de Leyrit has been described as a weak-kneed and feeble-minded official, both inefficient and incompetent. He was neither prepared to adopt the policies of Dupleix nor willing to accept the English pretensions which ignored the existing treaty.

De Leyrit protested to the English when an English army under Lieutenant Colonel Heron accompanied Muhammed Ali's elder brother Mahfuz Khan on a campaign to collect taxes from the Palayakars of Madurai and Tirunelveli early in 1755, but when his protests were treated indifferently, he sent an army of 500 Europeans and 1,000 sepoys under the command of Maissin in June 1755 to Turaiyur which had been transferred to French control by Nandi Raja of Mysore during the siege of Tiruchchirapalli, but whose Palayakar refused to pay tributes to the French. Captain Caillaud who was the English Commander in Tiruchchirapalli prepared to challenge Maissin, but he was forbidden by the Madras Governor and Maissin had no difficulty in reducing the Palayakar. Inflated by his success Maissin marched against Ariyalur but was halted by de Leyrit who was informed by the Madras Governor that Captain Caillaud would oppose the move.

On 30 January 1756, an English army of 500 Europeans and 500 sepoys encamped at Vellore and demanded Murtaz Ali of Vellore to pay up the dues he owed Muhammed Ali, the Nawab of Arcot. De Leyrit pointed out to the English that their action was a breach of the Treaty but when they showed little inclination to abide by his protest, he sent 700 Europeans and 200 sepoys to Vellore. Major Kilpatrick who commanded the English force was alarmed at the French move and quickly agreed to give up his tax collection on behalf of Muhammed Ali. 100

On the West Coast, even the flimsy peace failed to prevail. The princes of Nileswaram tried to get back the Nileswaram fort and received assistance from the English at Tellicherry. There were many clashes in 1755. On 5 April 1756 news was received that one of the princes had defeated the French in two hand-to-hand engagements; subsequently the French lost two officers and 20 sepoys; some time later the French fort at Mattalaye which maintained communications between Ramanthali and Nileswaram was lost; the garrison consisting of one officer and twenty soldiers was put to the sword. At this stage, negotiations were initiated by the prince regent of Kolathunad; the Mattalaye fort was restored and the French fired a salute of 15 guns at Mahe on 22 July 1756 to celebrate the repossession of Mattalaye.¹⁰¹ Kerorier was appointed by de Leyrit to command the Mattalaye fort. On 17 November 1756 news of the outbreak of hostilities in Europe between France and England reached Malabar via Basrah and Bombay.

In Bengal, the English captured Calcutta and Hooghly on 1 January 1757 from Siraj-ud-doula and had compelled him to sign a treaty in February 1757 which restored to the English all their earlier privileges. The Nawab had agreed to the treaty in view of his difficult position caused by the seizure of Delhi by Ahmed Shah Abdali. The French who had no love lost for the Nawab secretly desired the Nawab's defeat at the hands of the English but at the same time did not desire to face his violence. The Nawab's offers of alliance against the English were spurned by the French at Chandernagore repeatedly; the English gun-boat which reduced Hooghly sailed past Chandernagore's batteries, making Siraj-ud-doula suspect collusion between the English and the French. The French in Chandernagore had in the meanwhile learnt of the outbreak of hostilities in Europe. Their Chief



to be followed towards the French in Bengal notwithstanding they finally drew up a plan of attack by land and water; on 14 March 1757 fighting started. Terraneau, a French artillery officer, betrayed to the English that strategy of Renault for a price* and on 23 March the French surrendered. The quick victory of the English at Chandernagore put fright into the Nawab who entered into continued correspondence with Clive at Calcutta and was finally persuaded to take steps against the French all over Bengal.

Jean Law de Lauriston was expelled from Kasim Bazaar on 7 April 1757 and was forced to march out of Bengal into Bihar with a force of 100 Europeans and 60 sepoys. The Nawab who had ordered him out to please the English later vacillated and wrote letters to him asking him to return to Murshidabad or at least halt at Raj Mahal. In response to the letters Law changed his route and was not far from the place where the Nawab was captured by the English after the battle of Plassey. On hearing the Nawab's defeat at Plassey, Law made haste to leave Bengal and reached Bihar. An English force under Eyre Coote despatched by Clive being in pursuit of him, Law got out of Bihar and reached Allahabad where he offered his services to Shuja-ud-doulah. Frenchmen in other settlements of Bengal like Dacca were also expelled. Some of them were imprisoned by the English but others escaped mostly by land to join their countrymen in the Northern Sarkars. One group captured an English ship to sail to Machilipatnam. As for the Nawab, Clive was far advanced with the conspiracy of supplanting him with Mir Jafar; the road to Buxar lay open invitingly.

The news of the fall of Chandernagore and Kasim Bazaar caused consternation in Pondicherry but Duval de Leyrit was not reduced to inaction. When he learned that the English had reduced their forces at Fort St. George, sending one half to Madurai and the other to Nellore in an attempt to reduce all insubordination to Muhammed Ali, Duval de Leyrit hastily assembled all the troops he could muster in Pondicherry and sent them towards Tiruchchirapalli under the command of d'Auteuil who had returned from France lately. Sixty miles west of Pondicherry lies Elavanasur whose Qiladar was friendly neither to the English nor to the French.

* Terraneau is said to have sent a portion of the money for his old indigent father. The old man having learnt the means by which his son had acquired it, refused to touch it or to make use of it. In despair Terraneau hanged himself at his own door with his own handkerchief.

On 16 April 1757, d'Auteuil captured the place and marched to Ariyalur. Without reducing Ariyalur, d'Auteuil marched towards Tiruchchirapalli (in the middle of May) upon learning that the English force in the fort had been considerably depleted due to Captain Caillaud's campaigns against Madurai. The presence of d'Auteuil compelled Caillaud to order a retreat from Madurai and march to Tiruchchirapalli. In spite of d'Auteuil's careful plans to challenge Caillaud on his route and to prevent his troops from joining the garrison, he failed whereupon he rapidly retired to Pondicherry.¹⁰⁴

D'Auteuil's forces were reorganised and the command was given to Saubinet whom de Leyrit ordered to proceed to Vandavasi where an English force under Adlecron had been sent from Madras. Saubinet's arrival forced Adlecron to quit Vandavasi but only after burning down the place. Saubinet retaliated by marching upto Kanchipuram and after setting that famous pilgrim and educational centre to fire, started looking for an opportunity to attack Adlecron. In September Saubinet was reinforced with some men lately sent from France and he was able to capture Chittapet, Tiruvannamalai and some forts in the vicinity.¹⁰⁵

Duval de Leyrit was informed from France that a large force was being sent to Indian waters. Part of this force, composed of 980 men of the Lorraine Regiment under Marquis de Soupire, arrived at Pondicherry and was employed to reinforce Saubinet at Chittapet. On 8 September 1757 eleven ships of this force were sighted at Fort St. David giving rise to panic in the town. The English Council issued orders to Captain Caillaud in Madurai, Polier in Tirupati and Ford in Kanchipuram to get back to Madras at once for they expected an attack there. These orders were not put into effect when it was learnt that the squadron of eleven ships and the troops it brought did not intend to move out of Pondicherry till the arrival of the full force commanded by Count de Lally. However, de Soupire worked on a plan in December 1757 to seize Tiruchchirapalli with the jail-break of French prisoners of war in the place who numbered nearly 400. The plan was discovered by the English in time and one of its ring-leaders, de la Forde, was hanged.

At the end of 1757, Hyder Ali, Faujdar of Mysore at Dindigul, made his entry into the Carnatic battles. He took the fort of Sholavandan, entered Madurai District and maintained contact with the French at Srirangam. Intelligence reports reached the English at Madurai that the French garrison in the Srirangam temple had sent a detachment of Europeans and sepoys with artillery to Hyder Ali at Dindigul who was preparing to attack Madurai with the augmented force. The reports were premature but pinpointed a forceful ally that Duval de Leyrit had successfully cultivated. A force of 300 sepoys and 75 Europeans under d'Astruc was sent to

Dindigul to join Hyder Ali in an attack on Madurai; but Hyder Ali was called away to Shrirangapattana and the attack fell through. D'Astruc after his meeting with Hyder Ali left for Srirangam where he died on 22 March 1758.

The French won some noteworthy military victories in the Deccan where Bussy having waited at Srikakulam till 10 May 1757 turned to reduce the English factories at Madappalom, Bandermaalanka and Ingeram all of which were situated in the Godavari delta. He then attacked Vishakhapatnam and obtained its surrender on 24 June 1757. But Bussy's absence from Hyderabad naturally weakened the influence of the French in the Nizam's dominions; his enemies became active at Court and began correspondence with the English; Balaji Baji Rao invaded Mysore collecting *chauth* and capturing forts which Bussy had prevented in 1755. The English tried to force an alliance with the Marathas against the French and negotiations were carried on at Madras with Murari Rao Ghorpade of Gooty. The English engaged a force of Maratha cavalry under Amrit Rao to fight the French but they arrived too late for the defence of Chittapet or Tiruvannamalai. The French had retired to Pondicherry by the time. The English were in the meanwhile successful in obtaining influence in the Nizam's court.

Lally Tollendal (1758–1761) :

The King, his mistress Madame de Pompadour and the Directors of the Company sought a man of destiny whom they could commission to command the largest ever expeditionary force to India; they finally picked Comte de Lally. His appointment was received with enthusiastic acclaim by the French in India. Duval de Leyrit had expressed his happiness* in a letter written to Salabat Jung informing him that the King was despatching an immense army commanded by a great general.¹⁰⁶ Lieutenant General of the King's army, Colonel of a regiment in his own name. Comte de Lally was appointed King's **Commissaire** and **Commandant Général** of all French establishments in India on 31 December 1756. He arrived in Pondicherry on 28 April 1758 after an inordinately long voyage.^{**107} The squadron was commanded by d'Ache with 1080 soldiers and 50 gunners.

* But there were reservations too. Marquis d'Argenson one of the very influential courtiers of Louis XV had issued a grim warning when the **Conseil de l'Inde** of the Company announced Lally's nomination: "Pondicherry will have a civil war within its walls along with an aggressive war at its gates; the plans of my friend are excellent but believe me, we need in India someone who will implement them."

** The first part of Lally's command consisting of 980 men of the Lorraine Regiment had reached Pondicherry in September 1757 under Marquis de Soupire.

Lally was given clear instructions before leaving France: "Seize first the English places on the coast, Fort St. David, Madras without commitment of forces to the interior". Lally himself had proclaimed the war cry: "No more English in the Peninsula". In one of his early letters to Bussy, he declared his prophetic mission: "The King and Company have sent me to India to chase away the English. When I have exterminated the English from this entire coast I will undertake without getting out of my room, those other operations which so far have cost many men to the King and much money to the Company."¹⁰⁸

Lally tried to make up for the time lost in transit by deciding to carry out an immediate assault upon Fort St. David. The soldiers who had disembarked after a year at sea were ordered to march to Fort St. David the next day and to start a siege after capturing Cuddalore. When he found that his order to march the army to Fort St. David at once could not be implemented for lack of transport arrangements, he ordered the bullocks to be seized from the villagers and pressed into service; when their number proved insufficient he ordered the inhabitants to be forcibly enlisted as porters and non-combatants. In vain did de Leyrit represent the difficulties that would arise from alienating the attachment of the inhabitants. Lally rejected the seasoned advice of the mature **Conseillers** of Pondicherry and behaved as imperiously as an aristocrat of pre-revolutionary France.

Driven to the point of desperation Lally wrote to de Leyrit: "...if you continue to leave me devoid of everything, exposing me to face a general discontent, I will inform the King and the Company of the zeal which their employes show in their service; but I will take efficacious measures in order not to defend within the short sojourn I intend to make in this country, selfish interests and personal motives which I see to be the occupation of every member at the risk of the total loss to the Company."¹⁰⁹ He demanded funds for the prosecution of the war, insisting that the **Conseil Supérieur** and the Governor were to provide him with whatever he demanded, but the finances of the Company in Pondicherry were in a deplorable state. As early as in 1756, Leyrit had given due notice of his financial bankruptcy: "I find myself in the most critical situation, my debts in Pondicherry have risen to more than 26 lakhs".¹¹⁰ Even Marquis de Soupire testified to their straightened circumstances: "They awaited the arrival of the squadron to be paid at least a part of what was due to them but the funds which we brought (1, 600,000 livres) were exhausted within less than two months, although they served only to meet the

current expenses and those of the newly embarked troops.”¹¹¹ But Lally the imperious refused to listen to the explanations of de Leyrit and the *Conseillers*, treating them as selfish and cowardly souls, intent on defrauding the King and the Company to their own advantage and advancement.

Nevertheless, Count d’Estaing, one of Lally’s brigadiers led the march to Cuddalore; he was soon joined by de Soupire and then by Lally himself. On 4 May 1758, Major Polier surrendered Cuddalore and withdrew to Fort St. David. In the meanwhile there was a minor naval engagement off Cuddalore in which neither d’Ache nor Admiral Pocock emerged respectable, but in any case, the command of the sea remained with the French. The siege of Fort St. David started in great earnest under the personal command of Lally. After 17 days, Lally reduced it and the French occupied it on 2 June 1758. Lally preened himself that within a fortnight of his arrival, he had captured the strongest English fort on the Coromandel Coast which had defied Dupleix on four different occasions. He refused to admit that the sudden appearance of d’Achl’s ships before Fort St. David on 31 May 1758 without any challenge from Admiral Pocock was the crucial factor that persuaded the English to surrender the fort. Lally ordered the fort to be razed to the ground.* The same circumstances led to the surrender of Devakottai when d’Estaing appeared before the place on 4 June 1758; like a great victor, Lally entered Pondicherry amidst great fanfare and festivity.

Lally’s military ideas smacked of the mediocre. He turned down Marquis de Soupire’s proposal to synchronise an attack on Tiruchchirapalli Fort with a revolt by the 400 French prisoners of war kept in the place. The project had high chances of success due to the withdrawal from the Carnatic of almost all English forces to Madras where a French attack in strength was expected. But worse than rejection of de Soupire’s proposal was his decision to hand over Srirangam to Hyder Ali of Mysore. Srirangam was not only a persistent reminder that although the French had not succeeded in driving the English and Muhammed Ali out of Tiruchchirapalli, it was equally true that the English and Muhammed Ali in their turn had not been able to drive the French out of the place; besides Srirangam being a well-known pilgrim centre, brought valuable revenue to the French. These considerations did not weigh with Lally when he ordered the transfer. Two days later the Mysoreans abandoned Srirangam when Captain Joseph Smith bombarded the place; the English captured eight pieces of cannon which the French had left with the Mysoreans.¹¹²

* His order to raze Fort St. David to the ground introduced an element of vengeance in Anglo-French hostilities and prepared the way for retaliatory action.

Lally was equally indifferent to the problem of transport of field pieces and supplies for his marching armies. At no time was this seen to such a telling effect as during his Thanjavur campaign. Driven almost to desperation by financial distress, without hope of any forced loans or levies from Pondicherry or its villages Lally conceived the plan of invading Thanjavur.* A bond drawn up in 1751 for Rs. 5,000,000 payable by the Rajah of Thanjavur to Chanda Saheb who later assigned it in favour of the French India Company was now brought out of the archives and presented for payment. A greater trump card was Shahjee whom the French had picked up in Fort St. David and whose pretensions to the Thanjavur throne were of long-standing. The campaign was misconceived and mismanaged from start to finish because Lally had no idea of the logistics involved. Sixteen rivers with bridges on none, of which six alone were fordable lay across the route of the army from Pondicherry to Karaikal; Thanjavur itself was criss-crossed with numerous irrigation canals, compelling a semi-amphibian operation. Lally set out on 18 June 1758 and reached Karaikal on 25 June 1758 covering 100 miles in eight days; having failed to bring sufficient supplies with him and having failed to collect a market, he looted Nagappattinam, bullied the Dutch and the Danes at Tarangambadi into surrender of 20,000 pounds of gunpowder and other military stores. He behaved like Muhammed Ghazni when at Kivelur and Trivelur he broke down the idols in the temples hoping to hit gold; he ransacked the houses and temples, dragged the tanks with nets, all in search of what he needed badly—gold.

The Rajah of Thanjavur started negotiating with Lally while sending out appeals for help to the English at Madras and Tiruchchirapalli. Shortage of ammunition and provisions compelled Lally to raise the siege with little gain and little ceremony; on 11 August 1758 Lally's gallant regiment of Lorraine retreated from Thanjavur having obtained in payment 2,00,000 rupees. Lally's decision to raise the siege was opposed by his best brigadiers, Saubinet and d'Estaing but their counsels were drowned by the other ten who supported Lally. He reached Pondicherry on 28 August 1758 only to learn that d'Ache had decided to sail his squadron home. In the Joint Council held on 31 August, Lally informed d'Ache that he needed the squadron to conduct the siege of Madras. D'Ache pointed out that any naval operation in the Coromandel during October would be ruined by cyclones and depressions in the Bay and that he had orders not to tarry in the Coromandel beyond September.¹¹³ He sailed away early in September; his departure made Lally's position deplorable.

* The originator of the scheme was Father Lavour.

Even before his appointment to the Indian post, Lally had condemned Dupleix and his policies in a Memoire submitted to Schelles; one of his earliest decisions on reaching India was to circumscribe Bussy's activities in the Deccan. Lally had sent Marquis de Conflans* ahead of him to India and had asked him to proceed to Hyderabad as second-in-command to Bussy.

When Bussy had gone to the Northern Sarkars and was expecting a definite call for help from Nawab Siraj-ud-doula of Bengal in 1757, Salabat Jung's younger brothers, Nizam Ali and Basalat Jung, conspired with Shah Nawaz Khan, the Diwan and instigated the troops to agitate for their arrears of salary. The conspirators succeeded in forcing Salabat Jung to surrender the royal seal and to make him almost a prisoner at Aurangabad. Upon hearing the success of the conspirators, Bussy lost no time to march from the coast to Aurangabad covering 400 miles in 21 days. By his timely arrival in Aurangabad and by his tact and diplomacy, he was not only able to restore the Nizam's personal liberty and royal authority but was also able to break the ring of the conspirators. Shah Nawaz Khan, Haider Jung and Muhammed Hussain lost their lives; Nizam Ali fled in panic and Basalat Jung surrendered to make peace. After these tumultuous events, Bussy had just reached Hyderabad with Salabat Jung when he received Lally's letter of recall. Conflans in his letter dated 24 June 1758 appealed to Lally not to call Bussy from Hyderabad: "We are running a great risk in abandoning Salabat Jung in having him and the entire country against us". 114 From Hyderabad, Bussy sent, what Lally needed most urgently-money. He sent a lakh of rupees as a first instalment, followed by another lakh and a half; the third instalment was yet another lakh. In spite of Bussy in Hyderabad turning out to be the most dependable source of finance, Lally decided to recall him, knowing that it went against the spirit and the letter of the instructions passed on to him in France. Bussy's recall was expressly set down in Lally's letter of 11 June 1758 which Bussy received on 15 July 1758 when he had returned to Hyderabad. He was ordered to march to Pondicherry via Maohilapatnam and bring Moracin along with him and all available troops.**

* Conflans was confidant and family friend of Lally. The Marquise of Conflans was responsible for Lally's promotion to the rank of Lieutenant-Colonel by her influence in the Court; and her daughter Felicité de Conflans was amorously attached to Lally even after her marriage. Conflans had been first appointed as Major to Bussy's army in the Deccan but had been recalled and sent to France to defend Dupleix in 1754.

** Dupleix's critics had derided the bifurcation of the French forces of the Carnatic with one half under Bussy sent away to Hyderabad and the other half being numerically insufficient to besiege and capture Tiruchchirapalli. They had held it up as Dupleix's greatest error. Lally was determined to rectify Dupleix's fault and to join all his forces in one siege-hammer blow on Madras

Three days after the receipt of recall orders, Bussy took leave of Salabat Jung and marched to Machilipatnam. Here he was joined by Moracin and together they marched south reaching Nellore on 4 September 1758. The Qiladar of Nellore, Najibulla, was a supporter of the French and had recently received a contingent of 80 French soldiers with whose help he had successfully repulsed an attack by an English force. Leaving Moracin and the major part of his forces in Nellore, Bussy reached the Carnatic and met Lally at Vandavasi on 27 September 1758. Saubinet's detachment which had captured Tiruvannamalai, de Soupire's forces which had overrun Karangoli and de Crillon's troops after seizing Tiruvottiyur had all gathered at Vandavasi. On 5 October 1758 Arcot was overpowered and Lally took it as a great victory, great enough to be celebrated in Pondicherry. The English had withdrawn their contingents to Madras from Kanchipuram and Kaveripak; Captain Caillaud with a large force marched out of Tiruchchirapalli and retired to Madras not by land but by sea. The Carnatic was thus rid of the English for the time being except for Chengalpattu and for a small force in Tiruchchirapalli under Joseph Smith. Yet Lally proved incapable of using time or territory to overpower the English at Madras.

The siege of Madras started on 14 December 1758; the town was easily occupied and mercilessly looted. Lally with 3000 French cavalry had greater military strength than the English but his supply lines were emaciated and he lacked the sinews of war in spite of his best efforts. The defence of the Fort under George Pigot, Col. Lawrence and Engineer John Call was well organised; the sallies from Chengalpattu upon the besiegers also picked holes in the siege. Lally admitted failure on 16 February 1759 and raised the siege but not without accusing his officers and the Pondicherry **Conseillers** of spinelessness.

First surrender and after (1761-1778)

The first reverse came even before the siege of Madras. From Bengal an English detachment commanded by Col. Forde reached Northern Sarkars by sea and linked forces with Anandaraja of Vijayanagaram to march against Rajahmundry where Marquis de Conflans was stationed with the remnants of Bussy's army. The two armies met at Kondur a little to the north of Rajahmundry on 7 December 1758 and Conflans was routed.

Immediately after the reverse at the gates of Madras came news of further progress by Col. Forde's armies in the Northern Sarkars. Salabat Jung coming to know of the defeat of Conflans and the difficulties of the French, marched at the

head of an army towards Machilipatnam where Forde had been held up for more than a month. On 8 April Machilipatnam was captured and Conflans was made prisoner. The threat from Nizam Ali to Hyderabad compelled him to plan his retreat from the Northern Sarkars; he came to an agreement with Col. Forde and signed it on 12 May 1759. By this treaty the eight districts depending on Machilipatnam, Nizampatnam and Kondavidu were given to the English; Salabat Jung undertook to dispense with the French forces in his dominions and never to entertain them in the Deccan. After this treaty, the French troops marched to Adoni where Salabat Jung employed them. D'Ache who had sailed away in September 1759 had not only weakened Lally at Madras but had also made it impossible to send help to the Northern Sarkars when it was most needed.

The situation in Pondicherry was near bankruptcy. All the country around Pondicherry upto Vandavasi and Chittapet had been rented out for five years to two Europeans at fourteen and a half lakhs of rupees per year. When they were approached for advances to meet the emergency, they expressed their helplessness. Lally thereupon let the lands on a higher rent to Raza Saheb, the discredited son of Chanda Saheb whom he proceeded to proclaim the Nawab of Arcot. The notorious Noronha now became Lally's confidant and between them, the worst colonial practices were resorted to. The members of the *Conseil* had no salaries for months together; the dubashes of the Company were compelled to sell their valuables in order to lend money for the war effort. Those who could not pay were thrown into prison; a special gibbet was newly set up near the *Tribunal de la Chauderie*. A regular exodus started; those who remained hoped against hope that Lally would be replaced by Bussy. Orders did come in October 1759 making Bussy second-in-command, next only to Lally.¹¹⁵

Bussy tried to mend matters using his new position; he succeeded in getting Lally to set aside Raza Saheb and to offer the Nawabi of Arcot to Basalat Jung who had moved east from Adoni and was campaigning in Nellore. Bussy undertook a mission to Basalat Jung whom he met at Saidapuram on 10 November 1759. He returned with cannons and cavalry but in his absence, Vandavasi was captured by Eyre Coote. Lally then decided to recapture Vandavasi. He assembled all his forces there and pinned all his hopes on one single decisive battle. The battle of Vandavasi fought on 22 January 1760 proved decisive indeed; Lally was routed and Bussy captured prison r. Nothing else was expected of an army that was seething with mutiny and torn asunder with dissensions and distrust in the top echelons. After Vandavasi, Pondicherry, Mahe, Gingee, Thyagar and Karaikal alone remained to the French; all else was lost.

The turn of Karaikal came next. An attack from the sea began on 28 March 1760; the town was easily occupied but Fort Dauphin resisted. On 3 April 1760 soldiers from Tiruchchirapalli marched up to invest it by land. Two days later Karaikal surrendered. The defence which was in charge of Renault St. Germain was so poorly conducted that he was tried by a court martial and cashiered. Such judicial persecutions only showed the extent of despotic powers that Lally wielded.

Pondicherry could offer no serious resistance when the attack came; within its walls there was no unity and loyalty but only civil strife. But Lally was supremely confident of his ability to repeat the achievement of Dupleix; he spent time and money on the fortifications. Coote had captured Valudavur on 8 April 1760 and on 19 July the English were at Villianur. Mainville who was the French emissary at Mysore had suggested a year earlier an alliance with Hyder Ali but it had been turned down. Now Lally tried to get Hyder's help. On 21 July 1760, Maqdam Saheb, the brother-in-law of Hyder Ali reached Pondicherry. "Their happy arrival under our own walls has given us superiority in armed strength" wrote Landivisiau* on 26 July. 116 But very quickly the Mysoreans got fed up with Lally who in turn accused them of inactivity, cowardice and disloyalty. Lally thus lost a valuable ally when the Mysoreans marched out of Pondicherry on 13 August 1760.

On 18 August 1760 an 'Assemblée Nationale' was held in an attempt to unify the forces for the defence of Pondicherry. But nothing fruitful resulted due to Lally's hatred for the town, its officers and inhabitants. The irascible Lally upon capturing Fort St. David had razed it to the ground; now that the tables had been turned, Lord Pigot in revenge ordered the total destruction of the white town, the European settlement of Pondicherry. Coote wanted to spare the town or at least await orders but Pigot was unyielding in spite of de Leyrit's personal appeals to him. The destruction of Pondicherry was so methodically carried out that there was hardly a building left intact. The fort and its walls, the Governor's house, churches, the Capuchin house and even private houses were levelled to the ground.** Anandarangapillai died on 12 January 1761 and thus escaped the fate of having to witness the destruction of the town. Many Frenchmen abandoned Pondicherry to serve Indian princesses.*** Many volunteered to serve in the English armies unable to suffer the conditions in the English prisons in India. Many others took refuge

* Brigadier in the army of Lally.

** Le Gentil, the astronomer who travelled in India at the time, compared the destruction of the place to that of Jerusalem by Vespasian.

*** René Madec and Claude Martine for example.

in Tarangambadi, Parangipettai, Nagappattinam and Sadras waiting for the day when they could return. Unable to provide provisions for all the inhabitants Lally expelled all Indians from Pondicherry and for six days they remained in the no-man's land between the opposing forces. Finally Coote allowed 140 Indians to pass his lines, most of them half-dead through starvation. Lally finally surrendered on 16 January 1761; 2060 persons of whom 381 were civilians fell into the hands of the English; 500 cannons, 100 mortars and 100 soldiers were sent to Madras to join the English military service; the rest were thrown into prison. The contempt that the population had for Lally was amply expressed in an anonymous pamphlet that made its appearance on 16 August 1760 "Gentlemen and Ladies, you are requested to help with your charity Mr. de Lally who proposes to proceed to Mecca on a pilgrimage to obtain remission for his crimes. If you have any used diamonds or any old vessels or any other goods which you could bring to him, the great Mohamed will preserve you in paradise." 117 Lally was sent to Madras from where he was despatched to England. He was later allowed to proceed to France to defend himself but all his pleas had no effect; he was sentenced to death and executed on 8 May 1766. Thus ended the career of Lally who was the worst ruler that Pondicherry had known in all its existence; but he was not worse than Louis XV who was the real culprit.

Mahe was the last French settlement to be overrun. Gingee and Thyagar had been captured early in January 1761; the morale of the troops was so low that the English had difficulty in keeping track of deserters. The French troops in these forts were commanded by Irishmen whom Lally trusted but in spite of every internal advantage, they capitulated. On 27 December 1760, an English force of 635 men commanded by Hector Munro landed in Tellicherry. Munro was ready to seize Mahe but he was instructed by the Bombay Governor to wait till the surrender of Pondicherry, news of which reached on 31 January 1761. On 3 February, Major Munro called upon Louet to surrender Mahe and all its dependencies but he replied that he could not "but defend and support his Majesty's territories." 118 However in the face of superior forces, Mahe surrendered on 9 February 1761. The terms of the surrender provided that the French loge at Kozhikode would be treated as neutral, that the Roman Catholic religion was not to be disturbed and that private properties of various descriptions were not to be confiscated. On 11 February 1761, Ali Rajah of Cannanore surprised the French Fort at Ezhimalai and most barbarously massacred the garrison of 20 men. He had all along pretended to be an ally of the French but in the hour of helplessness, he turned against his one-time friend. After the capture of Mahe, the English handed over the settlement to the Rajah of Kadathanad who destroyed most of its buildings and fortifications.

The Seven Years' War was brought to an end by the Treaty of Paris signed on 10 February 1763. Although the Treaty was signed early in 1763, it was only two years later that the establishments were restored to the French. Jean Law de Lauriston, nephew of the celebrated financier and younger brother of Jacques Law de Lauriston who surrendered at Tiruchchirapalli was nominated **Commissaire** for the King and Governor of all French establishments in India on 18 March 1764. He arrived the following January and on 18 February accepted the remission of Karaikal from Claude Russell. The English insisted on retaining a clause in the instruments of transfer obliging the French to pay an annual tribute to the Rajah of Thanjavur.¹¹⁹ Law made Karaikal his headquarters for a few months because Pondicherry was all in ruins. Pondicherry and its dependencies were taken over by Law on 11 April 1765.*¹²⁰ The French establishments in India were restored to the extent which they possessed in 1749 and with all their privileges and rights; one exception was however provided in that Chandernagore in Bengal was not permitted fortifications nor troops more than necessary for keeping internal law and order. The French loge at Machilipatnam and the village of Francepeth, two miles to the north-west of the town, were taken over by Jean Panon, a member of the Pondicherry **Conseil Supérieur**, on 5 May 1765. The instrument of transfer clearly stated that the French were exempt from all transit duties. The restitution of Chandernagore was effected on 15 June 1765, Law de Lauriston having travelled to Chandernagore to take it over personally as he had done in Pondicherry and Karaikal. Renault St. Germain who had been **Chef** at the time of its surrender was reappointed but he was unable to resist the new pressures and tactics of the English. In July 1767, Jean Baptiste Chevalier was appointed President of the **Conseil d'Administration**. Mahe and its dependencies where once stood five forts including the one at Valiya Kallai were handed over on 20 October 1765 to Louis de Plusquellec, a Captain in the army, whom Law had nominated to take over Mahe.¹²¹ During the first months of his governorship, Law spent months outside Pondicherry at Karaikal and at Chandernagore leaving an interim Governor in the capital; Nicolas was Governor-in-charge throughout 1765; André Boyelleau was Governor-in-charge from June to December 1766. Law was more familiar with conditions in Bengal and he felt that the centre of political gravity in India had shifted to Bengal requiring the French to concentrate in the area; however his plan to shift the headquarters to Chandernagore was met with rebuff. Law seriously planned to make Chandernagore the seat of the French Indian Governor.

* The dependencies taken over were Ozhukarai, Ariyankuppam, Virampattinam, Murungappakkam, Pakkamudiyanpet, Olandai, Abhishekappakkam, Kommapakkam and Kalapet.

He issued an ordinance on 1 August 1766 by which a **Conseil Supérieur** was set up at Chandernagore. The ordinance was challenged by members of the **Conseil Supérieur** at Pondicherry.¹²²

Living in tents and improvised huts, faced with acute shortage of almost all types of building materials, the inhabitants who returned to Pondicherry showed remarkable results within six months. The foundations of the old houses had not been destroyed and therefore rebuilding proceeded on the old lines within the old limits, the private houses being raised almost on the same old sites. Within three years, normalcy had returned and the population rose to 60,000. The influx of the population was largely due to the English war with Hyder Ali which made life insecure in the Carnatic.

The factious in-fighting which was so pronounced in Lally's time left its ugly legacy in the opposition of **Conseiller** André Boyelleau and his group to Law and his policies. The opposition to the creation of a **Conseil Supérieur** in Chandernagore, while the Governor was in residence there, was spearheaded by Boyelleau. The unrest in the garrison consequent to Boyelleau's appointment of the notorious Baron de Caccatty as the Commandant, the punishment meted out to René Desjardins and the criminal proceedings thereafter indicate the grimness of the faction fight.¹²³ The opposition to Engineer Bouvet whom Law had appointed to build fortifications for the town also was steeped in faction-fight. Work had begun on Bouvet's plan in 1768 when Boyelleau got him recalled to France; another engineer by name Declaisons arrived from France only to cancel all of Bouvet's plans but Law got Bouvet back in 1775. Within the year, Bouvet died leaving the work on the fortifications incomplete. When the next Anglo-French war broke out in July 1778, Pondicherry lacked fortifications and defence.

When he was the King's **Commissaire**, Law had enough special powers with which to overrule the obstacles created by the factions, but when the restitution of the establishments was completed, his special powers as **Commissaire** ceased and as Governor he had no authority to overrule the **Conseil Supérieur**. There was no fixity in the number of members of the **Conseil Supérieur**; some members of the **Conseil** functioned in settlements outside Pondicherry since the **Chefs** of all the different establishments were members of the **Conseil Supérieur**. The **Conseil Supérieur** was also a court of criminal and civil appeal; even judgements pronounced by the military courts were subject to revision by the **Conseil Supérieur**.

In the case of Pondicherry, the **Conseil Supérieur** had original jurisdiction. The Governor was answerable to both the Directors of the Company and to the King's ministers and there was no constitutional machinery regulating relations between the Company and the ministers. However, such a defect could not be rectified in France under the Bourbon despotism.* 124

The failure of the French Company led Voltaire to the trenchant criticism: "... ..At last there was left to the French only regret for having spent immense sums for over forty years for maintaining a Company which never made the least profit, which never paid to its shareholders and creditors from the profits of its commerce, which in its Indian administration lived only on secret brigandage..."¹²⁵ It came to be widely accepted that something had to be done to the Company. The monopoly of trade which the Company had all along enjoyed was suspended from September 1769 as a first step; subsequently the Company was liquidated, its territories and properties were taken over by the King and the trade with India was thrown open to all French citizens by the royal decree of August 1770. But the freedom of trade announced by the royal decree neither contributed to an expansion of commerce nor did it offer any promise for the future.

Following these far-reaching decrees, the administration of the French establishments in India was overhauled. An **Intendant** and **Commissaire Ordonnateur** was appointed in 1773 charged with the civil administration including finance, commerce, shipping, police and justice. The Governor was charged with political and military matters, especially foreign relations with the powers of India. The two officers were entirely independent of each other with equality of status and neither was subject to the majority decisions of the **Conseil Supérieur**. The **Conseil Supérieur** was made a purely judicial body with appellate and original jurisdiction in civil and criminal processes. The **Commissaire Ordonnateur** presided over the **Conseil Supérieur** and its members included the **Commandant Général**, the senior most administrative officer, seven **Conseillers**, a **Procureur Général** and a **Greffier**.** 126 The first **Intendant** and **Commissaire Ordonnateur** was Foucault who was appointed in October 1773.

* Jean Law pointed out the defects of the administrative system in his *Mémoire* which he submitted in 1767.

** The weakness of the new administrative arrangements was criticised by Jean Law de Lauriston in his *Mémoire* of 1777.

In other developments in the meanwhile Hyder Ali of Mysore entered North Malabar marching in from Mangalore in February 1766; early in April 1766, after crossing the Mahe river at Peringattur, a force of 1000 Mysore troops entered Mahe in an attempt to discover the Kadathanad treasures. In his *Mémoire* of 1767, Law had considered the maintenance of the settlement to be uneconomical.¹²⁷ Quite soon after, it became evident that Mahe had to be retained for maintaining contact with Shrirangapattana, Hyder Ali's capital to which it was nearer than any other French settlement.*

Hyder Ali's second expedition against the Zamorin of Kozhikode was undertaken late in 1773. As the Mysorean army under Srinivasa Rao advanced, the Zamorin sent frantic appeals for help to all his neighbours but there was none to run Hyder's gauntlet, not even the English at the time. Of all people, Duprat decided to offer protection to the Zamorin; early in 1774 he took 100 men with him out of the 120 he had in all and went by sea to Kozhikode in a frigate. He signed a treaty with the Zamorin on 12 February 1774 and immediately wrote to Hyder Ali asking him to abandon the campaign against the Zamorin who was now under the protection of the French. Hyder took little note of the letter and Srinivasa Rao's formidable force entered Kozhikode with little resistance. The Zamorin fled south and Duprat unceremoniously returned to Mahe.¹²⁸ Law reprimanded Duprat for his rash and imprudent adventure in a letter dated 21 February 1774 while he also wrote to Hyder Ali professing his friendship. But Duprat seemed to be working at cross-purposes. He demanded that Hyder Ali's trade should be routed only through Mahe since the French had been given a monopoly of the pepper trade of Kadathanad. Hyder Ali protested both in his name and in the name of the Rajah of Kadathanad but Duprat haughtily replied in a letter addressed to Srinivasa Rao that he would never yield to the demands of Kadathanad.¹²⁹ Law had no option but to recall Duprat which he did in September 1774.

De Repentigny who was sent to take over from Duprat found himself in a difficult position. The prince of Chirakkal dispossessed by Hyder Ali in 1766 had now made up with Hyder and had been recognised as the vassal ruler of Chirakkal by Hyder; he overran the Kurungottu Nair's territory in Kottayam and threatened to attack Mahe where the Kurungottu Nair had taken refuge. De Repentigny was forced to defend himself; he succeeded in three battles fought in February and

* Picot de la Motte was the *Chef* from 1765 to 1779 but during his absence on leave from 1773 to September 1774 Duprat was placed in charge.

March 1775, forcing the Prince of Chirakkal to come to terms. The Kurungottu Nair was to be recognised in return for a tribute of 80,000 rupees; the money was collected by de Repentigny as loans from some persons in Mahe and paid. De Repentigny's action ran the risk of incurring Hyder Ali's hostility; he made way in 1775 for Picot de la Motte who returned from leave and held the post of Mahe till its capture by the English in 1779. He was however able to get the villages of Chembra, Pallur, Chalakara and Pandakkal on the northern bank of the river by Hyder Ali's goodwill and some territory from Kurungottu Nair.

The French were forced to close down their factory at Dacca in December 1773; Jugdia which was conceded only in 1767 was washed away in 1773; their factories at Patna and Balasore ceased to have trading operations. They however continued at Kasim Bazaar with some measure of success because it yielded a dependable annual revenue of 5500 livres.

Second surrender and after (1778-1790) :

The spontaneous and rapid restoration of Pondicherry proclaimed defiantly that the Seven Years' War had not finished the French in India finally. Schemes to stage a come-back were submitted by Law de Lauriston and Chevalier in Chandernagore to organise a general alliance of Indian princes against the British in Bengal. The first of such schemes was drawn up by Jean Law de Lauriston in 1767;¹³⁰ Law's *Mémoire* of 1777 suggested political and military measures for nothing less than driving the British out of India.¹³¹ Several schemes were put forward from Chandernagore by Chevalier for whom it was almost an obsession to send unauthorised diplomatic missions through René Madec, Comte de Modave and Joseph Gentil to many Indian princes including the Mughal Emperor and the Maratha chief. Chevalier however remained outwardly friendly with Verelst, Governor of Bengal and the English Council at Calcutta and thus obtained permission to widen the ditch around Chandernagore for purposes of drainage. But actually he built a perfect moat of 40 to 50 feet wide and 10 to 12 feet deep with an earthen rampart all around 50 to 60 feet in breadth and eight feet in height. This was considered a breach of the treaty regulations and the English Council at Calcutta despatched troops and workers to demolish the ramparts and fill up the moat.¹³² But in France, neither the last years of Louis XV nor the early years of Louis XVI were marked by any interest in Indian establishments or their affairs; the Schemes of Chevalier and Law were shelved; their preoccupation was with Canada and Louisiana. The American war of Independence (1776-1783) offered an unsought-for opportunity to humble

England; a new spirit of revival was in the air when de Sartine became **Ministre de la Marine et des Colonies** in 1776. The old schemes and **Mémoires** were fished out of cold storage and the diplomatic mission of Saint-Lubin was despatched to Pune (Poona) with the scheme for an alliance between the French and the Marathas.

Guillaume Léonard de Bellecombe who took over from Jean Law de Lauriston in January 1777 did not set much store by St. Lubin's diplomatic mission. In spite of his limited Indian experience, he was able to point out in his earliest **Mémoire** that the French in India should choose Hyder Ali as their ally and avoid the Marathas;¹³³ he outlined immediate political and military measures in view of English preparations for another war. Early in 1778, Bellecombe travelled to Mahe in order to meet Hyder Ali personally and to establish cordial relations with him preparatory to the conclusion of a solid political and military alliance. ¹³⁴ In Europe and America, war had started in January 1778 as soon as France extended recognition to the United States of America but the news of the war reached India only in June 1778.

The English were the first to attack and their first blow was against Chandernagore where Chevalier had already been marked by them as their worst enemy although there was a time when Chevalier's bungalow in Goretty was a week-end resort for the English factors at Calcutta. Chandernagore was seized by Col. Dow on 10 July 1778; Chevalier escaped and reached Cuttack but there he was arrested by the English with the help of the Marathas who had been looked upon as trustworthy allies of the French by Chevalier. A little later, Machilipatnam was occupied.

De Boistel evacuated Karaikal without any summons from the English on 9 August 1778. He brought his small garrison by sea to Pondicherry where reinforcements were badly needed. Bellecombe hastily completed the fortifications, with the help of Dulac, the Chief Engineer. René Madec helped him to form new companies of sepoys. Another company of 150 cavalry commanded by one Nalla Thamby Rao sought service in Pondicherry at the time. The presence of Law de Lauriston in Pondicherry to conduct political negotiations and of a French squadron in the Coromandel waters under Tronjoly gave added courage to Bellecombe to reject the demand to capitulate made by Sir Hector Munro on 8 August 1778. However the defiance of Pondicherry was compromised by the cowardly departure of Tronjoly to Mauritius after an indecisive action off Pondicherry on 10 August 1778. With the departure of the French squadron, the fate of the town was sealed but yet Bellecombe defied for 77 days. When he capitulated on 18 October 1778, all honours of war were accorded to him and to the garrison by Munro. ¹³⁵

Mahe was the last to be overrun. It had neither the resources nor the troops to defend itself. Picot sought in vain the help of Hyder Ali. The fear of Hyder Ali's intervention held back the English for a while from attacking Mahe. Then in March 1779, Braithwaite marched in with a large force. The French had no other alternative than to surrender which they did on 19 March 1779. Sometime later, following the hostilities which broke out between Hyder Ali and the English, Mahe was captured by Hyder. Three years later the English succeeded in driving out the forces of Hyder and carried their work of destruction of Mahe to its logical end.

The year 1780 proved very critical for the English. In September of that year, Hyder Ali captured Col. Baillie alongwith 3720 men in a brilliant battle manoeuvre at Perumpakkom and went on to capture Arcot. All the great forts of the Carnatic like Ambur, Vandavasi, Vellore, Perumalkovil and Chengalpattu were brought under simultaneous siege. This brilliant campaign with which Hyder Ali opened the Second Mysore War was so inspiring to the supporters of the French cause that there was a general uprising in occupied Pondicherry against British authority in October 1780.

During this period when one by one the lights were flickering out, no expeditionary force and no squadron came from France or Mauritius; it was only in 1781 that a squadron led by de Suffren was despatched; much later, in December 1781, Marquis de Bussy who was in retirement in France was recalled and asked to command an expeditionary force to South India.

Events compelled Souillac, the Governor of Mauritius, to take note of South India and he began negotiations for a treaty with Hyder Ali through Morlat, one-time **Procureur** at Pondicherry. A naval force commanded by d'Orves with a regiment of infantry on board was despatched by Souillac to the Coromandel Coast. It reached Cuddalore on 25 January 1781. Hyder Ali had at this time raised his sieges and was trailing a small English army of 8000 infantry and 800 cavalry led by Eyre Coote which had marched out of Madras to suppress the general revolt of the citizens of Pondicherry against the English. From Pondicherry Coote proceeded south towards Cuddalore where the French force under d'Orves had arrived. Hyder Ali requested d'Orves to land his infantry and to remain on the coast but d'Orves refused. Not being content with his refusal, he suddenly decided to return to Mauritius and on 15 February 1781, he sailed away. Naturally Hyder Ali broke off all negotiations with Souillac. "Had the French admiral left only two frigates to block up the road of Cuddalore, consequences might have happened as fatal to the interests of Great Britain in the East Indies as flowed in North America from the Convention of Saratoga." 136

Pierre André de Suffren did not belong to the ignominious company of d'Ache, Tronjoly or d'Orves. He was an innovator in naval strategy and tactics, dedicated to his service and an outstanding admiral in action. He brought to India 11 battleships and three frigates along with nine transport vessels with Duchemin's troops on board reaching Coromandel waters on 4 February 1782; off Madras on 17 February, he fought his first naval action in which the English ships under Admiral Hughes suffered heavy losses.¹³⁷ He then moved to Parangipettai as advised by Hyder Ali through Morlat* and completed the disembarkation of Duchemin's troops by 10 March 1782. His second engagement was off Tirikonamalai in Sri Lanka on 12 April but a cyclone at sea forced both Hughes and de Suffren to disengage.

Duchemin's troops had at this time occupied Cuddalore and obtained a foothold on the coast where the French had none. He had been advised by Souillac not to hazard large scale operations without the arrival of the main force under Marquis de Bussy.**¹³⁸ De Suffren sailed from Tirikonamalai on 4 June and spending some time in Tarangambadi, where he received provisions sent by Hyder Ali, reached Cuddalore on 20 June 1782. Here de Suffren learnt that relations between Duchemin and Hyder Ali had become strained due to Duchemin's failure to join him in his attack on Perumalkovil and Vandavasi. The intervention of de Suffren and his despatch of de Mossaic on a special mission to Hyder improved matters and a joint action against Nagappattinam was drawn up for which Hyder Ali despatched 3,000 troops. As part of the attack on Nagappattinam, de Suffren fought his third naval action; it was off Nagappattinam on 6 July 1782 which ended in equal losses to both sides. On 20 July 1782, de Suffren and Hyder Ali had an interview at Cuddalore; de Suffren passed on to Hyder the information that an expeditionary force under Bussy was on its way to India and would shortly arrive to operate against the English jointly with Hyder.

* He was formerly **Procureur Général** at Pondicherry and since the fall of that place, was at the Mysore Durbar as French diplomatic agent.

** After his capture at Vandavasi in 1760, Bussy had been sent to England in an English ship which was captured by a French boat and taken to France. Bussy thus reached France after a lapse of 23 years.

The first detachment of Bussy's force reached Batticaloa under d'Aymar on 21 August and de Suffren joined them. A combined attack on Tirikonamalai was launched on 25 August and the harbour and forts were captured on 30 August 1782.¹³⁹ An English attempt to retake Tirikonamalai was repulsed by de Suffren's naval victory on 3 September. The defeat of the English squadron under Hughes at Tirikonamalai prevented it from blockading the French forces at Cuddalore whose command had been taken over by Hoeffelize when Eyre Coote was advancing to lay siege to Cuddalore. The naval defeat inflicted at Tirikonamalai sent panic into the Madras Council which ordered Coote to fall back on Madras, in anticipation of an attack by de Suffren.

In the winter of 1782, de Suffren was at Achin in North Sumatra where he had hoped to be reinforced with Bussy's forces. But because of an epidemic at Mauritius, Bussy's departure was delayed and the rendezvous was finally fixed at Tirikonamalai. Hyder Ali was dead by then; de Suffren learnt of Hyder's death on 7 December 1782 from an English ship which he had captured near Ganjam in January 1783; Tipu Sultan had succeeded in Mysore but he had left the Carnatic for Malabar where the English were pressing forward to Mangalore; the appeals of Hoeffelize and de Suffren had no result on account of their indefiniteness about Bussy's arrival.

Even before embarking on his second expedition, Bussy set down words of wisdom: "To present this enterprise as easy and capable of being exercised with feeble means is to deceive the King, the Nation and the ministers."¹⁴⁰ The delay in his despatch, his forced hibernation in Mauritius and the change in the political and military situation in South India had made his expedition a hazardous venture. Not only was Hyder Ali dead and his son Tipu Sultan out of the Carnatic, Basalat Jung also dead, poisoned perhaps by his brother Nizam Ali. Bussy disembarked his troops at Manjakuppam near Cuddalore on 16 March 1783.¹⁴¹ An English army commanded by Smith marched from Madras to attack Cuddalore. Both the English and French fleets also headed for Cuddalore where they fought a day-long action on 20 June 1783 which was a victory for de Suffren.¹⁴² The English position was thoroughly weakened by the defeat of the naval forces; and Bussy was planning an assault when news reached on 29 June 1783 that peace was made in Europe. "The peace of whatever little advantage it might be for the future of India, nevertheless, came at a happy moment to save the honour of the nation", wrote Bussy on 9 September to de Sartine.¹⁴³

The Treaty of Paris signed in September 1763 brought hostilities to a close; with regard to French India it provided for a return to *status quo ante* 1763. The establishments were to be restored to France only after the French troops in service with Tipu in Mysore were withdrawn. 144 The implementation of the Treaty therefore came to be involved with cessation of the war between Tipu and the English and was delayed. Bussy was however permitted to move his residence from Cuddalore to Ozhukarai, and a little later, in September 1763 he obtained permission from the Madras Council to transfer his troops and stores from Cuddalore to Pondicherry on condition that the French flag would not be hoisted in the town till the formal transfer had taken place. Even after the second Mysore War was brought to an end by the Treaty of Mangalore in March 1764, the formal transfer of settlements was delayed because of the dispute over Tirikonamalai which Bussy was unwilling to return to the English on the ground that it had belonged to the Dutch in 1766.

In 1763, Bussy received a suggestion from Baudouin of the Ministry of Colonies to plan the transfer of French Indian headquarters from Pondicherry to Mahe. It was argued that Pondicherry was too near Madras and Cuddalore while Mahe was the nearest port of supply to Mysore. Bussy opposed the plan in his letter of 28 September 1763, and cogently argued for the retention of Pondicherry. 145 He spent his last days trying to save the inhabitants from epidemic and starvation and to rebuild the town. He was not spared for long; and on 7 January 1765, he died at Ozhukarai in his 65th year of a cardiac ailment.

Pondicherry with its suburbs and the two districts of Bahur and Villianur were handed back to the French on 1 February 1765 when de Boistel, acting on behalf of Coutenceau, who was in charge at Pondicherry after Bussy's sudden death, took over. 146 In May 1765, for reasons of economy, the Government of Louis XVI brought all French establishments east of Cape of Good Hope under one Governor-General with headquarters at Mauritius. Souillac became the first Governor-General.

Souillac* carried on negotiations regarding the commercial rights of the French in India. The Treaty of 1763 contained provisions guaranteeing complete freedom of commerce to all French subjects in India but in actual practice this came

* There were five Governors in seven years beginning with Coutenceau who was succeeded by Souillac. When Souillac became the first Governor-General, he was succeeded by de Cossigny. He had commanded a French detachment with Tipu. Cossigny held office for about two years from September 1765 and then came Count de Conway whose services lasted two years. His Irish origin and unpopular functioning made him hated all round. But when the revolution broke out, de Fresne was the Governor.

to be denied in Bengal and Northern Sarkars, where the English were unwilling to give up their monopoly in salt, saltpetre and opium trade which they had established through their political dominance. Souillac was able to negotiate provisionally a commercial convention relating to French commercial rights and privileges which was ratified by the Versailles Convention of 31 August 1787. The new Convention limited the import of salt into Bengal by the French Company adding the proviso that whatever was imported was to be sold mainly to the English in the first instance but otherwise the clauses of the Convention gave freedom of commerce "subject to the laws of the country."¹⁴⁷

The Royal Edict of August 1784 reorganised the *Conseil Supérieur* which was to have in addition to the Governor, the Intendant and the senior most administrative officer, a few merchants or distinguished citizens nominated by the Governor and working on an honorary basis. Civil and criminal jurisdiction was outlined for the *Conseil* in addition to its appellate powers. But public-spirited men offering honorary services were rare. In 1787 a *Conseil d'Administration* was set up to help the Governor in the administration of the diverse settlements but more interesting was the creation of a Consultative Chamber of Indian Notables in 1778.*

In Karaikal, de Boistel who had been its chief in 1780 assumed charge on 26 February 1785. He had difficulties created for him by the British when Hudleston, the Resident at Thanjavur contended that the whole of Thanjavur was under the protection of the British and that the French could not travel out of Karaikal without his permission. After de Boistel's death in June 1785, Mainville became *Chef*. During his time, widespread agrarian unrest broke out in Karaikal and in all the dependent villages. Bellecombe had laid down certain regulations in 1777 relating to payment by farmers for irrigation canals and roads and had rented out the collections to one Savarimuthu Pillai. The revenue rentier reduced the *varom* or expenditure permitted for rice cultivation in order to increase his own profits whereupon the vast majority of the farmers abandoned Karaikal and its villages. Comte de Conway despatched de Fresne to Karaikal to bring round the farmers to an amicable settlement and he produced the desired results. Soon after, the salt manufacturers demanded an increase in their price-rates and on 15 May 1783

* The Consultative Chamber became defunct when the settlements came under British occupation. The institution was however revived after the settlements were restored to the French in 1785.

an increase of 10 per cent was accepted. Marguenat became Commandant of Karaikal in June 1788 but his administration was so unpopular that another general uprising of farmers took place; the movement was suppressed by Touffreville who was sent on a special mission against the peasants. This mission proved such a success that he was made Commandant of Karaikal after Marguenat. When news of the Revolution reached Karaikal, it was already a witness to popular upsurge on its own. 148

Chandernagore was restored to the French on 18 August 1784. According to the terms of the peace treaty, the settlement was permitted to have a ditch around it but no fortifications; troops necessary for the maintenance of law and order alone were to be maintained. Dangereux who took over the settlement was the Commandant till 1787. He was followed by Mottet who made way for de Montigny in October 1788. De Montigny had vast experience of Indian conditions having been French representative at Pune from 1779 onwards. He established state monopoly in the sale of opium and introduced the system of granting permits for the import of salt. These measures improved the revenues of the settlement. The formation of a new French India Company by the decree of 24 April 1785 associated with the Controller General Calonne and for that reason generally known as the Calonne Company, gave a spurt to trade and commerce; Chandernagore benefited most from this new Company's activities. But Montigny soon went on a witch-hunt; he got the **Ordonnateur** Mottet, his predecessor, recalled to Pondicherry; he dismissed the assessors of the **Tribunal de la Chaudière**; he brought accusations of financial irregularity against everybody who refused to bend to his wishes. His policies prepared the ground for an outburst of revolutionary activity in 1790.

The French got back Mahe on 15 August 1785. Louis Marin who took over the settlement, was the Commandant till 24 November 1787. He found the Carmelite Church burnt down, all the records and materials in the Government House carried away to Tellicherry and private buildings demolished. 149 His protests to the Tellicherry Council proved to be of no avail. During the first five years after restitution, loans had to be taken from representatives of the Calonne Company to build a new Government House, a powder magazine, a prison and a new church. 150 Count de Canaple took over from Marin in November 1787 only to find the local population highly agitated over the execution of the Kurungottu Nair, a long-standing ally of the French who had been kidnapped from Mahe by Tipu's soldiers and beheaded at Kozhikode on charges of molesting a Muslim girl. To make matters worse, the Nair's territories had been occupied by the English. Raids by Tipu's soldiers into French territory to carry away Hindus for forcible conversion to Islam after the painful practice of circumcision were reported to Pondicherry by Canaple.

His protests to Tipu brought forward assurances that instructions had been issued to his soldiers to stop the raids but in practice they continued.¹⁵¹ The dispersed nature of the French possessions made it difficult to prevent such raids and proposals were made to Tipu for an exchange of enclaves but differences about the enclaves to be exchanged brought the negotiations to an end. The helplessness of the French administration to obtain co-operation from their ally caused much discontent offering fertile ground for civil disturbances in 1790 when news of the Revolution in France reached the settlement.

As for Yanam, it had been restored in February 1785. Although it was Martin who took over the site from the English, the **Chef** for quite a while after him was Sonnerat*, the well-known traveller and naturalist. The commerce in salt and cotton was the main interest of the few Frenchmen in Yanam but the news of the Revolution in France created a stir among the handful of French merchants there.

The loge at Machilipatnam along with the village of Francepeth was restored to the French on 16 March 1785. Le Forestier accepted it on behalf of Coutenceau. Le Forestier was only a merchant in the Company's employment but he functioned as **Chef** and dispensed justice both to the French and Indian inhabitants in an arbitrary fashion, his Secretary functioning as the Registrar of the Court.

The Revolution and after (1790-1816):

News of the Revolution in Paris, of the succession of events from 5 May to 4 August 1789 reached Pondicherry on 22 February 1790 by way of the 'Bienvenue' which arrived from Mauritius; no news was more welcome in a place seething with discontent. Frequent changes in the administrative personnel, the utter neglect of the settlements and the purposelessness of the policies pursued were enough grounds. The French citizens of Pondicherry wasted no time to call a General Assembly (First) on the model of Paris; it met on 25 February in front of the Government House and demanded the formation of a Citizens' Militia and the transfer of the arsenal and the ammunition depot to the Militia. The next day, six persons were chosen as members of a deputation to meet Governor de Fresne with a memorandum signed by 83 citizens.

* Author of the famous travelogue "Voyage aux Indes Orientales et en Chine."

On 1 March 1790, the citizens formed a General Assembly (Second) with Moracin as President who was charged with the duty of presenting the grievances of the French in India to the National Assembly in Paris. The Governor was shrewd enough to accept the deliberations of the General Assembly and himself administered the oath of loyalty to its members in the name of "the Nation, His Majesty and the Laws". The Revolution in Pondicherry was not only loyal to His Majesty, but also debarred Indian citizens from participation both in the General Assembly and in the deputation. Even the requests by the Indian notables in the Consultative Chamber* to allow them join the movement were turned down. The General Assembly then proceeded to elect a Permanent Committee of 65 members who were to remain in office for 18 months and to place before the National Assembly (Paris) the wishes and grievances of the French citizens in India. They prepared six *mémoires*, in which they included their prayers for two representatives from India to be admitted to the Paris National Assembly and for freedom of commerce in India; one of their requests was to free Pondicherry from the control of the Governor-General in Mauritius and for protecting and fortifying Pondicherry.¹⁵² Kerjean, Delarche** and Beylié were sent to Paris to submit the *Mémoires* to the Assembly.

The Committee of Representatives and Governor de Fresne worked in co-operation at Pondicherry but elsewhere the revolution was turning extremist. In June 1790, a demand was made by some extremist elements in the Committee of Representatives for the admission of Indians as members of Pondicherry Municipality to be created soon but it was turned down by the Committee of Representatives. This issue became so acrimonious that ultimately seven members of the Committee were expelled from French India as "dangerous agitators".*** On 17 August 1790, the Committee received the "touching appeal of the National Assembly to the Provinces" and the decree for the creation of Municipalities and administrative assemblies. Soon after, a Municipality was set up in Pondicherry

* The Consultative Chamber became defunct when the establishments came under British occupation. The institution was however revived after they were restored to the French in 1785.

** As instructed by the Committee, Kerjean and Delarche delegated their powers to Monneron. The position of Moracin as President of an Assembly demanding expropriation of a monopoly company of which he was the Director General in India showed the insincerity of the leaders of the movement. Moracin himself explained his conduct as having been guided by the best interests of protecting his Company.

*** They were however acquitted by the National Assembly of Paris in March 1792.

with five members and a Mayor. A Permanent Committee of 27 members with representatives from each of the other settlements was set up. The Municipality was inaugurated on 14 November 1790 and functioned in close co-operation with Governor de Fresne. The decisions of this Representatives Committee after being sanctioned by the Governor and registered in the Municipality, became the laws of the colonies; it was the origin of democratic functioning but the privilege was limited only to the French citizens. Even Topas and Franco-Indians were kept away from the Permanent Committee and the Municipality although they were admitted to the Assembly on 2 March 1790 and had voted in the important sessions of 20 and 21 August. 153

In February 1791, Moracin returned to France having given up the Presidency of the Permanent Committee in October 1790. He was succeeded by Lagrenée de Mezières. The Permanent Committee sent a submission to the National Assembly through Moracin; the local inhabitants clamoured to be informed of the contents of the submission forwarded. The Committee declared "their demand inadmissible". The discontent of the people grew so menacingly strong that the General Assembly demanded the Governor to promulgate martial law; it called upon the Mayor to "discover the authors, instigators and accomplices of the seditious movement" among the local people. Martial law seems to have suppressed the movement of the local inhabitants totally.

In Paris, Monneron and Beylié were accepted as members of the National Assembly and sworn in on 1 October 1790. The abolition of the Calonne Company's monopoly and the re-establishment of the freedom of commerce were decreed by the National Assembly at the same time.

In Pondicherry the Permanent Committee now struck up a haughty and imperious attitude demanding a status superior to the Governor and the Mayor of Pondicherry, and disputes started cropping up frequently. A crisis was averted by summoning a General Assembly (Third) in June 1791 which proceeded to dispense with the 27-member Permanent Committee and to replace it with a Colonial Assembly* of 21 members—fifteen for Pondicherry, three for Chandernagore and one each for each of the three other settlements. 154

* French inhabitants above 25 years of age having a minimum domicile of two years in French India were to constitute a General Assembly to elect the representatives to the Colonial Assembly. The members of the Colonial Assembly were to be replaced every two years. The executive power was vested in the Governor and the *Conseil Supérieur* was the highest judicial authority.

The new Colonial Assembly met on 6 July but only Pondicherry, Karaikal and Yanam sent representatives. Chandernagore had by then come under the influence of extremists and flatly refused to recognise the authority of the Colonial Assembly in Pondicherry. The extremists in Mauritius maintained close contacts with Chandernagore and challenged the right of Pondicherry to speak as the headquarters of the French Indian establishments. ¹⁵⁵ However the Colonial Assembly exercised power till December 1792 and worked in co-operation with the Governor. The old 'Fleur-de-lys' was abandoned and the new Tricolour was hoisted on 2 August 1791.*

Much of the work of the Colonial Assembly including the 29 articles drawn up for a new constitution and the reorganisation of the Municipality was set aside later at the instance of the Civil Commissions but its recommendation that four representatives of the local population should be admitted to the Colonial Assembly when matters pertaining to Indians were being discussed was noteworthy. Equally important was the decision of the Colonial Assembly to impose on the priests in Pondicherry the Civil Constitution of the Clergy passed by the National Assembly. Most of the priests refused to accept the new dispensation and left for Madras. ¹⁵⁶

In September 1792, Lescallier who was one of the Civil Commissioners deputed by the National Assembly to supervise the reorganisation of the Colonies arrived at Pondicherry. An Engineer** charged with the construction of the fortifications in the town also arrived the same month alongwith a reinforcement of 400 French soldiers. Lescallier proposed the election of a new Colonial Assembly consisting of only 12 members elected by French citizens of 25 years and above with a minimum of one year's domicile in French India and owning property worth Rs. 500 or with a minimum of two years' domicile and paying a monthly rent of rupees five. ¹⁵⁷ Franco-Indians generally called Topas were also given the right to vote at the elections to the Colonial Assembly subject to certain conditions.***

* The theft of the hoisted tricolour from the flag mast on 5 February 1792 showed that there were opponents of the Revolution in Pondicherry functioning in an organised manner; it was even thought that Thiruvambalam the Nainar or Police Prefect was involved although he was finally exonerated.

** de Phélines.

*** They should be legitimate children of free parents and own property worth Rs. 500 or pay a monthly rental of Rs. 5 and be able to read and write French. The active citizens under this category numbered only 214 plus 14 Topas.

A Colonial Assembly based on these provisions was elected in December 1792 and one of the first tasks entrusted to it was the reorganisation of the administration of the Indian settlements. Lescallier then announced many far-reaching reforms. Slave trade was prohibited on 22 February 1792 in pursuance of the King's instructions to the Civil Commissioners.¹⁵⁸ Huts were built for the homeless outcastes; a new survey of the villages belonging to Pondicherry was undertaken.

In Chandernagore, the reforms introduced by de Montigny* created deep discontent among vested interests. Richemont, the Procureur, accused of financial irregularities, went in appeal to Pondicherry where he was hailed as a hero by the General Assembly. Upon his return, he tried to organise a popular uprising in order to obtain his office of **Procureur**; he summoned a General Assembly on 30 April and proceeded to declare the **Conseil Provincial** dissolved and elected a new Council which recognised Richemont as the **Procureur**. A smaller Committee with Richemont as one of its members was set up. The General Assembly ordered de Montigny to appear before it and to accept its authority as lawful. Montigny was also asked to place the command of all forces in the settlement at the disposal of the General Assembly. Montigny was first inclined to agree to these terms but refused to recognise the General Assembly. Finding however his position in Chandernagore very precarious, he escaped with his family to Chinsurah. The General Assembly was now supreme; this was some revolution. Power passed into the hands of a coterie of mean and greedy self-seekers. Unable to stand the regime of Richemont, many members of the General Assembly quit Chandernagore and took refuge in Serampore where de Montigny had shifted to from Chinsurah. Frimont, the Commandant-in-charge of the troops was also unable to serve under Richemont for long. He too broke with the Committee and marched out of Chandernagore with his troops. Montigny took this as the right occasion to march into Goretty with a small army to instal himself in the old bungalow of the **Chef**; his contacts with Cornwallis at Calcutta led him to take up an unhelpful attitude. When news was received on 2 September 1790 that Montigny had been dismissed from service by Governor Conway, the Committee and the citizens' militia surrounded Goretty and forced Montigny and Frimont to surrender. They were both thrown into prison and later placed on board a small vessel to be sent to France for trial by the National Assembly. The English captured the ship carrying them to France and released both after taking them to Calcutta.

* The French resident at the Court of Pune became Commandant in 1788.

Mottet was despatched by de Fresne as Commissaire for Chandernagore, especially with a view to bring about a revival of trade. The unrelenting attitude of Richemont, however, prevented him from exercising any authority. Richemont started throwing into prison all those who criticised his despotic tendencies. De Canaple, the new Governor arrived in Calcutta but died of a sudden illness on 5 August 1791 without having achieved anything at Chandernagore. Between the Pondicherry Governor and the Richemont Committee, the gulf was too wide to be bridged and the intervention of the Commissioner from Mauritius only widened the breach. A General Assembly was summoned in Chandernagore. A rival Assembly was held at Calcutta by the émigrés a few days later. According to the Constitution drawn up by the Chandernagore Assembly, there was to be an Administrative Assembly (*Assemblée Administrative*) meeting once in three months and a Directorate (*Directoire*) in charge between meetings of the *Assemblée Administrative*. Richemont visited Ile de France and returned only in June 1792, having obtained support for his policy against Pondicherry. The factious fight ended only when the English arrested all the émigrés in Calcutta and captured Chandernagore itself on 11 June 1793. Richemont's Revolutionary Committee offered little resistance, revolutionary or otherwise.

In Mahe de Canaple was succeeded by Le Tellier in April 1790. Le Tellier's counterpart at Tellicherry was Taylor and between them protest notes were exchanged frequently in connection with English interference with trade and seizure of Kurungottu Nair's possessions. In the midst of these preoccupations, he had to look after the normal administration of the settlement. The revolutionary movement in Mahe was inspired and manipulated by Boyer, an agent of the Calonne Company, in November 1791; soon after, the French citizens of Mahe constituted a Colonial Assembly with Boyer as President. A new Court of Justice, a new National Guard and a Municipality were created. Boyer was elected Mayor. Now Mayor Boyer brought his personal enemies to trial and imprisonment; Le Tellier proved too timid to control the crafty Boyer. 159

Le Tellier was succeeded by Larcher in January 1792. He was quite capable and determined to maintain order in the settlement. The General Assembly which met on 24 June condemned Boyer and his associates whereupon they resigned their offices in the Municipality. However the new General Assembly was not recognised by Larcher who functioned without any limitation whatsoever on his powers. A political crisis followed and it could be resolved only by the session of the General Assembly. The General Assembly met on 8 July 1792 and decided not to set up either a Committee or a Municipality to curb the *Commandant* pending

the arrival of the Civil Commissioners from France. But on 13 July 1793, even before the Civil Commissioners could arrive, an English detachment sent by Col. Hartley under Captain George Mackenzie marched towards Mahe and summoned Larcher to capitulate. Larcher surrendered on 16 July 1793 under terms honourable to the French. 160

In Karaikal, the revolutionary movement seemed weak. The Municipality was established in May and Bouvoust was chosen Mayor. The Pondicherry Committee and the Colonial Assembly which replaced it later declared this move illegal. Hence it was decided to set up a civic organisation to protect the rights of citizens. But the European population appeared to have taken the news of the revolution in their stride. However only in April 1791 when the Citizens' Committee invited them to nominate their representative, did they wake up to take note of the mini-revolution. Their petty grievances against Pondicherry now found articulation.

Sometime later, seventeen Frenchmen in Karaikal met in a General Assembly and decided to abolish the Municipality and elected a Committee of three members for running the administration; they also elected a representative to the Colonial Assembly at Pondicherry. Subsequently when the Civil Constitution of the Clergy was made applicable by the Committee in accordance with the directives of the National Assembly at Paris, all the Catholic priests withdrew from there. In May, 1793, the Civil Commissioners Lescallier and Dumorier visited Karaikal to investigate the charges levelled against Touffreville, the **Commandant**, for delaying the supply of provisions to Pondicherry which was found to be false. In the meanwhile it became clear that war was imminent between the French and the English Governor Chermont ordered Touffreville to reach Pondicherry with his garrison to strengthen its defences. When Touffreville evacuated Karaikal on 19 June 1793, the English promptly marched in without a fight.

In July 1790, Le Canne and de Mars, two prominent merchants of Yanam, complained to the Governor of Pondicherry that Sonnerat was abusing his position for his private benefit and demanded without much effect, his recall. However, following the receipt of a circular from the Second Committee of Pondicherry, they decided to set up a Colonial Assembly and elected a Three-member Permanent Committee.

The new order deprived the **Commandant** of all powers, which were now transferred to the Assembly and the Committee. Danzas who was already a member of the Second Committee at Pondicherry was asked to represent Yanam on that body. He wrote back to point out the illegality of their actions, which left the

citizens of Yanam divided. Nonetheless, they sent a joint appeal to Pondicherry to send a Conciliation Commissioner. Interestingly, one of the factions decided to refer the issue to the local inhabitants. Shortly after, the two Conciliation Commissioners arrived from Pondicherry, whose efforts were not so successful in bringing about unity. The insult shown by a Frenchman to an influential Brahmin merchant triggered off a lot of commotion and spurred the local population to retaliate. The new danger brought the warring groups of Europeans together. The General Assembly which met soon after (1790) restored to the **Commandant** all his powers. But strangely enough, they did not bother to have their representative in the Pondicherry Assembly till the beginning of 1793. In June, the **Commandant** was forbidden to engage in private trade. However, when the war broke out, the settlement promptly passed into the hands of the English.

In Pondicherry, de Fresne found his powers totally eroded under the new dispensation. He therefore handed over charge to Touffreville who occupied a secondary position with no powers at all. In 1793 when Chermont arrived from France as Governor, Pondicherry came to learn of the overthrow of the monarch and the proclamation of the First Republic. For the first time in the history of Pondicherry, the slogan "Vive la République" was raised on 1 April 1793. Old usages like the Christian era, the raised arm salute, the titles of nobility and claims of privileges were cast to the winds; it was the fresh breath of a new political life. In France it was cut short by the outbreak of the Revolutionary War in which all the reactionary governments of Europe headed by Britain sought to crush the infant Republic even in its cradle. Although in Europe the Republic heroically defended itself and gave a fitting rebuff to its sworn enemies, in India it was quite another story.

Chermont learnt of the preparations being made by the English in India to attack the French settlements in June 1793. The preparations made by the War Council which included the two Civil Commissioners, two representatives of the National Assembly, the **Ordonnateur**, the Mayor and the Commander of the National Guard, proved totally inadequate. Chermont's appeal for help addressed to Tipu, Nizam Ali, de Vigie and Raymond met with no response. On 12 July 1793, the English army advanced to Perambai and English ships appeared in the Pondicherry sea two days later. Col. Braithwaite started bombardment on 4 August 1793 supported by a subversive propaganda through leaflets. The Colonial Assembly and the Municipality resisted for a fortnight but on 23 August 1793 Pondicherry once again went under English occupation. This time the black-out lasted till 1816.

Following the capture of Pondicherry in 1793, Col. Floyer was appointed Commandant of Pondicherry. The Municipalities were dissolved and replaced by a Lieutenant of Police. The British, however, retained the judicial administration upto 1798 when it was abolished following a complaint. The authority over the Tribunal of Justice was transferred to the District Collector of Cuddalore and Pondicherry. Col. Floyer was succeeded by Col. Nixon who was removed from office in 1795. Col. Braithwaite was then appointed Governor. Braithwaite gave place to Saint John in 1803 to be followed by Keith in 1804. Fallowfield who took over from Keith in 1805 held office till 1810; thereafter Lockhart and Hugh Fraser were in Pondicherry for a year each. In 1813 Captain Fraser was nominated First Commissioner. 161

To the British, the French menace still appeared very real for there were numerous French adventurers serving the Indian princes as army commanders and mercenaries but who could coalesce their forces and turn the tables upon the English. Such were Raymond, de Lallée, de Vigie, Piron, Perron, Dudrenec, de Boigne, Frimont, Bourquin * and a host of others.

The most remarkable of them was Raymond who was in the service of Nizam Ali; he had been given some territories the revenues of which were to be used for maintaining an army of 10,000. The territories being on the coast gave him scope to co-operate with French expeditions and he had carried on correspondence with the Pondicherry Government pledging loyalty and requesting military support to carry out grandiose schemes for driving out the English. Raymond died in 1798 and his place was taken by Piron who was a proclaimed Jacobin with definite plans of re-organising Frenchmen for the service of the Revolution. Wellesley realised quite early the dangers inherent with such mercenaries. In September 1798 he compelled Nizam Ali to sign a treaty disbanding Piron and his troops who were promptly imprisoned by English troops and later shipped to Europe.

Equally pivotal was the position of Perron who was in the service of Mahadaji Sindhia. Perron was a sailor who became a brigadier in 1789 under de Boigne in Baroda. In 1795 he succeeded de Boigne as Commander of Daulat Rao Sindhia's army. In 1803 Napoleon had sent Decaen to India with an expeditionary force to contact Perron who had by then surrendered to General Lake during the second Anglo-Maratha War. Frimont was also taken into Sindhia's service and so was Bourquin. Dudrenec served Holkar first but later switched over to Sindhia.

* He was a Savoyard.

More than the French adventurers and mercenaries, French menace looked formidable to the English in India because of their alliance with Tipu Sultan of Mysore. Tipu had no contact with France or Mauritius between 1793 when Pondicherry fell and 1797 when an accidental ship-wreck off Mangalore brought Ripaud to Shrirangapattana. Ripaud founded a Jacobin Club in the capital and the Sultan was enrolled as one of its members; Tipu Sultan was thus also Citoyen Tipu.¹⁶² He sent envoys with letters to the Directory in Paris. They reached Mauritius in January 1798 but the English got wind of the secret approach of Tipu. Napoleon's letter to Tipu written in February 1799 fell into the hands of the British at Jiddah.¹⁶³ The result was the Fourth Mysore War and the death of Tipu at Shrirangapattana in 1799.

In February the same year, the English authorities at Pondicherry under orders of Col. Braithwaite arrested a large number of Frenchmen and Indians alleging a conspiracy to join Tipu's service and fight against the English. In all 823 French citizens including women and children had chosen to remain in Pondicherry under English occupation even after they had been given the option to choose some other place of residence. Most of them were royalists and did not desire to return to strife-torn France.¹⁶⁴ Many of them were now arrested and thrown into prison; even Nidarajappa Iyer, one-time interpreter to the company was put in gaol where he died in 1804.

During the Consulate (1799-1803) Napoleon Bonaparte decided to send an expeditionary force to India. The Treaty of Amiens signed on 25 March 1802 provided for the *status quo ante bellum*; Napoleon used the respite to despatch General Decaen who had distinguished himself at the battle of Hohenlinden. Decaen reached Pondicherry on 15 June 1803; Binot, his **Adjutant**, landed with 150 men soon after and was provided with accommodation in Pondicherry by the English authorities. But the English in anticipation of the imminent renewal of hostilities between Napoleon and the British, bided time in their negotiations with Binot. Wellesley, the Governor-General, instructed the Madras Governor not only to refuse handing over Pondicherry but also to prepare for a surprise attack and seizure of the Binot detachment. Decaen was surprised to find an English squadron of nine battle-ships heading for Cuddalore and was nonplussed over the next moves when he received instructions to proceed to Mauritius to defend the islands in view of the imminent outbreak of hostilities. Leaving behind Binot and his 150 men Decaen escaped from Pondicherry. Official news reached Madras on 6 September 1803 that hostilities had been renewed against Napoleon whereupon the English at Madras promptly called upon Binot to surrender.

Binot turned down the demand and instead made preparations to seize and hold on to Villianur. The citizens of Pondicherry requested Binot not to involve them in a hopeless fight and finally Binot surrendered on 13 September 1803.

The second time Napoleon was roused to take interest in India was in 1808 when he gave detailed instructions about an expeditionary force of 19,600 soldiers and 10,600 sailors but the plans could not be put into effect because of the pressures created by the Peninsular war in Spain.

The Final Restoration and after (1814—1848):

The Treaty of 1814 provided for the restitution of all French settlements and loges in India which France had possessed as on 1 January 1792. Transfer of the settlements to the French had to be postponed on account of developments in France. The Peace Treaty of 20 November 1815 which was concluded after the final defeat of Napoleon paved the way for the restitution of the establishments. Under the terms of the treaty no settlement was to be fortified or to have troops more than necessary for maintaining internal law and order. All French troops in the service of Indian princes were to be disbanded including the officers in Holkar's service. Most decisive of the terms of the treaty was the recognition of English paramountcy by the French over all parts of India. However "in connection with the restitution of Pondicherry nothing was said on either side, unlike as in the case of the other settlements, about the exact limits of the territories returned to the French." 165

The Commercial Convention of 7 March 1815 provided that salt manufactured in Karaikal and Yanam over and above the requirements of French India establishments would be sold only and entirely to the English. The supply of opium to the French in Chandernagore at prevailing prices was also stipulated in the Convention which helped the formation of a joint Anglo-French front for the sale of opium to China. The Convention of Madras signed on 13 May 1818 provided that salt would not be produced in French India even for its own requirements but that the English would provide whatever was needed. An annual indemnity of 4000 star pagodas was to be paid by the English to reimburse the losses suffered by the salt producers.

The French accepted the restitution of Pondicherry on 4 December 1816. 166 Chandernagore was restored on 16 December 1816. Though the French were authorised to occupy their loges in Kasim Bazaar, Dacca, Patna, Balasore and Jugdia, they found the places in such ruin that they abandoned the idea of taking

possession of them. Karaikal was handed over by John Thackeray, the Collector of Thanjavur to de Beranger on 14 January 1817; Mahe was taken over by Philibet from Vaughan, Collector of Malabar, on 22 February 1817. 167 Yanam was returned on 12 April 1817.

The Vienna Settlement of 1815 worked out by the four power Holy Alliance brought the Bourbons back to France. Louis XVIII ruled for about nine years and was succeeded by his brother Charles X in 1824 but by 1830, the French bourgeoisie had enough of him and forced him to abdicate. He was succeeded by Louis—Philippe, the cousin brother of Charles X. He was on the throne till 1848. The first half of the XIX century did not produce any major change in the French Indian administrative system in spite of several constitutional experiments in Metropolitan France.

Count Dupuy who became Governor of French India on 26 September 1816 was directly under the Minister for Colonies in France; the office of Governor-General in Mauritius with administrative control over French India was abandoned. Dupuy held office till October 1825. He was responsible for the promulgation of the French Codes* in the French Indian establishments on 6 January 1819. These Codes for once sought to remove the confusion that prevailed in the realm of laws which governed the natives as well as the Europeans in the settlement. The *Conseil Supérieur* which was the highest judicial body was declared as *Cour Royale*; the *Tribunal de la Chaudière* came to be known as *Tribunal de Première Instance*. The composition of the Tribunals with provision for two Indian assessors was finalised by an ordinance. Dupuy was further able to report to France that he had succeeded in getting the old French loge at Surat re-established with all its old rights and privileges restored.

Viscount Desbassyns de Richemont succeeded Count Dupuy as Administrator General on 19 June 1826 and remained in office till August 1828. In him the cause of education found a redoubtable champion and during his brief tenure of two years, he gave shape to a broad system of primary, secondary and professional education in the establishments. He was so touched by the plight of the lepers that he saw to the establishment of a lepers' asylum. Even the judiciary came under the sweep of his reformatory measures. Indians were allowed to appear as advocates along with Europeans before the Tribunals. The Tribunals appointed a Brahmin, a Vellala and a Maulavi to administer the oath to witnesses from the Hindu and

* This did not include the *Code d'Instruction Criminelle*.

Muslim faiths. In October 1827 he set up a nine-member Consultative Committee representing the various communities in the establishments to guide the decisions of the Government and of the tribunals on issues whose solution required the knowledge of Indian laws, manners and customs of the indigenous population.

Cordier was in charge of the administration after Richemont. In October 1828 he granted permission to Théophile Blin and T. Delbruck to start a modern yarn factory in Pondicherry.* This marked the beginning of the industrial era in French India.

De Melay took over as Governor on 10 April 1829 and remained in office till 3 May 1835. It was during his time that the **Conseil du Gouvernement** was replaced by the **Conseil Privé** which consisted of the heads of the various administrative departments as well as one or two civilians nominated by the Governor.

After de Melay, Marquis de Saint-Simon was the Governor from 3 May 1835 to 27 April 1840. Mahe and Yanam languishing in a state of neglect were reduced to the status of loges. Nourquer du Camper was Governor from 27 April 1840 to 15 November 1844. The administrative system in French India was again reorganised by the ordinance of 23 July 1840. The Governor who was vested with considerable powers came to be assisted by **Chefs d'administration** in Pondicherry and **Chefs du Service** in the other establishments. A **Conseil Général** with headquarters at Pondicherry and a **Conseil d'arrondissement** each for Karaikal and Chandernagore were provided. The **Conseil Général** was composed of ten membres elected by an assembly of notables chosen by the Governor in Council from among the residents (European settlers and natives) and employees in the administration and in the Judicial Cadre. The same procedure was followed in relation to **Conseil d'arrondissement** of Karaikal and Chandernagore, the strength of which was fixed as five members in each region. The Governor was therefore bound to draw up every year a list of notables with a maximum of 45 and a minimum of 25 in the case of Pondicherry and 25 and 15 respectively in the case of the other two regions. The first list of notables was drawn up by the Governor in 1841. The fact that very few natives figured in the list comes as a pointer to the influence wielded by Europeans in the political affairs of the establishments.

* The factory was set up on the site where the Savana Mill was later established. In 1858 it was expanded to become a weaving and cloth factory producing cloth for export to Senegal and Réunion.

On 16 November 1844, Pujol took over as Governor and remained in office for more than four years (i.e. upto 5 January 1849) by which time the monarchy was once again set aside in France.

Under the Second Republic (1848—1852) :

The monarchy was set aside in France for the second time and the Second Republic was proclaimed on 24 February 1848. By the decree of 5 March 1848, the people of Pondicherry were called upon to elect a Representative to the National Constituent Assembly of France.¹⁶⁸ The instructions issued by the Provisional Government of France made it clear that there will be one representative for French India and a substitute to sit in the absence of the substantive holder.¹⁶⁹ Electoral rolls were prepared in a hurry to include all persons aged above 21 years. Elections were held under the direct guidance and supervision of the Governor. Lecour, a businessman of Nantes, was declared elected to the Constituent Assembly on 24 April 1849. But unfortunately the election of Lecour was validated subsequent to the promulgation of the law dated 15 March 1849 which withdrew the representation for French India.¹⁷⁰ Hence he could not represent French India in the Constituent Assembly of France. Governor Pujol in his report dated 25 November contended that the authors of this reform had not questioned themselves as to whether the elections would suit the interests and aspirations of the local population. In support of his contention he cited the fact that in Karaikal, the fishermen and members of pariah community were made to believe that the preparation of electoral rolls was a plot to deceive them and that it was meant to locate coolies for exportation to Mayotte or Réunion where they were required in abundance. Being thus misguided by interested elements, they ran away to the neighbouring British territory. As a consequence of this, the economic life of the settlement was badly affected. The observations of the Governor was sufficient reason for France to withdraw the representation on the pretext that the population was not significant and that their manners and customs were different from those of the French.¹⁷¹ This step, retrograde as it was almost brought to nought the high hopes generated by the proclamation of the Second Republic. De Lalande de Calan was the first **Commissaire de la République** having taken charge as Governor on 5 January 1849. But he died on 14 June 1850. De Calan was followed by many **Commissaires** who held office for short periods—Malassis from June 1850 to January 1851 and Bedier from January 1851 to December 1851 to be followed again by Malassis upto August 1852.

Under the Second Empire (1852—1870) :

Louis-Napoleon, nephew of Napoleon Bonaparte, who was President of the Second Republic, organised a plebiscite in 1852 and proclaimed himself Emperor Napoleon III and established the Second Empire. Napoleon III's reign was a period of colonial aggrandisement in Indo-China and in Africa as well as a period of wars against Russia, Austria and Germany. It was also a period of industrialisation which in its own way began to affect French settlements in India too.

De Verninac Saint-Maur who became **Commissaire de la République** on 1 August 1852 continued as Governor* till 1 August 1857. In accordance with a convention concluded with Great Britain (April 1853), France renounced its rights of manufacture and sale of liquor in Machilipatnam with effect from 1 July 1854 in exchange for a sum of Rs. 3,550 to be paid annually to French India.

Durand d'Ubraye succeeded Verninac and held office from 1 April 1857 to 17 January 1863. News of the Sepoy Mutiny of 1857 and its spread alarmed the people of French India; European inhabitants petitioned the Governor requesting him to arm the European citizens and to organise a militia that could protect the settlements from unforeseen breaches of peace. More than 400 Indian inhabitants submitted a memorandum at the same time requesting him to take action against the agitators. This application from the loyalists leads to the presumption that during 1857 when there was a general revolt against the British in India, there were at least a few in French India who did speak of a simultaneous action against the French in these establishments.

For eight years between 18 January 1863 and 1 June 1871, Bontemps was Governor of French India with a small break of seven months in 1867 when Trillard was in-charge. He was also the last Governor of the Second Empire. The most significant event which happened during Bontemps' period was the arrival of 'Le Godavery' the first steamship from France sailing through the Suez Canal (1869). Not only did Pondicherry get nearer to France by this revolution in communication, but helped it to develop quickly into a port of call for all ships sailing from France to the Far-East. The rapid expansion of French influence in Indo-China under the Second Empire led to an increase in traffic between France and the Far-East, inevitably leading to the improvement of Pondicherry.

* After the proclamation of the Second Empire.

Under the Third Republic (1871—1914) :

France under the Third Republic was one of the most successful imperialist Governments of Europe. After the consolidation of colonial rule in Algeria, France turned to Egypt and Tunisia. The establishment of French rule in Senegal, Nigeria, Congo, Sahara, Dahomey and Madagascar made the Third Republic responsible for the greater parts of Africa's partition. The conquest of Cochin-China, Annam and Cambodia made France a great colonial power in Asia too. Pondicherry thus became a link in the world wide chain of the Third Republic's colonies. There were many clashes of interests between the British and French imperialists some of which almost came near to military collusion; but the statesmen on both sides of the Channel realised the common danger from Germany which after its unification under Prussian leadership in 1870 quickly developed into a menace that threatened the whole of Europe.

The decree of 1 February 1871 which called upon the French establishments in India to elect a representative (*député*) to the French Parliament (*Assemblée Nationale*) marked a new landmark in the constitutional history of French India. The news was received with great jubilation by the French and the natives, especially the Christians. There were altogether 29,620 voters in the whole of French India, the right to vote being restricted only to men above the age of 25 having domiciliary and property qualifications. There were in all eight candidates. Sandou Odéar, a Professor of Tamil at *Collège de France* was the only Indian to contest the election. A proud Indian himself he championed the cause of Indians and demanded justice for them in public services and other walks of life. In the election held in May 1871 Panon Desbassyns de Richemont* secured 13,597 votes. 172 Although he did not secure an absolute majority, he was declared elected. In fact the law requiring the winning candidate to obtain at least half of the total number of votes was introduced only in 1873.

Faron became Governor on 13 November 1871 and remained in office till 13 May 1875. The sixteenth of January 1873 may perhaps be called a historic day for it was on that day that Ponnoutambypoullé, an Indian advocate, entered the court wearing socks and shoes. The Magistrate felt offended because an Indian had entered the precincts of the court with his shoes on, as in the manner of a European. He ordered the Indian advocate to adhere to the local custom. Ponnoutambypoullé refused to comply on the plea that the very nature of his footwear dispensed

* Son of one-time Governor of Pondicherry.

him from adhering to local tradition, whereupon the court imposed a punishment on him. He went on appeal to the **Cour de Cassation** where he was defended by one Jules Godin. The case was won and brought instant fame to Ponnoutambypoullé and Jules Godin. They were hailed as champions of the natives' rights. Some described it as a victory over European hegemony. This episode and its aftermath not only exposed the rivalry that existed between the Europeans and the natives but also paved the way for the further emancipation of the natives.

The decree of 13 June 1872 provided for a twelve-member **Conseil Colonial** at Pondicherry and a **Conseil Local** in each of the five establishments. Besides the Governor, the **Ordonnateur**, the **Procureur Général**, the **Contrôleur Colonial** and the **Chef de Service** of Karaikal, the **Conseil Colonial** included seven members elected by the **Conseils Locaux**. Of the seven elected members, two were to be Europeans and five natives representing the three major religious communities viz., Hindus, Christians and Muslims. The **Conseil Local** of Pondicherry consisted of 12 members, the one at Chandernagore of six members; Karaikal had eight members; Mahe and Yanam had four members each. There were however two lists of electors, one of Europeans and their descendants and another of natives. This was the device adopted to protect the interests of Frenchmen whose number was small compared to that of natives. Half of the number of members were elected by Europeans and their descendants while the remaining half by the local citizens. Elections since 1872 were held on the basis of two lists. Although the voting age was reduced to twenty one, women were not eligible to vote. The term of office lasted six years with one half of the membership renewed every three years.

Following the organisation of the **Sénat** in Paris under the law of 24 February 1875, the French Indian establishments were called upon to send a **Sénateur** to represent their interests in the metropolitan body. The **sénateur** was to be elected by the members of the **Conseil Colonial** (**Conseillers Coloniaux**) and **Conseils Locaux** (**Conseillers Locaux**). In the first election held on 26 March 1876 the former **Député** Desbassyns de Richemont was elected **Sénateur**. These developments paved the way for vast changes in the political life of the people in the course of the next few decades. Trillard took over as Governor on 7 November 1875 and remained in office till 25 October 1878. Sensing the political atmosphere in Pondicherry, Ponnoutambypoullé put forward the candidature of Jules Godin, his advocate in Paris, for the post of **Député** in consultation with Nadou Chanemougavelayoudamoudéliar who commanded the respect of Hindus. Jules Godin won the elections held on 16 April 1876 by an overwhelming majority (18,614 votes).

He was re-elected in the subsequent election on 11 November 1877 by 13,314 votes and held the seat till 1881. From then on political events in Pondicherry started taking shape around certain personalities. The structure and character of representative institutions in the establishments underwent some major changes as a result of the decree of 25 January 1879. The most notable change was that no member of the administrative cadre such as the **Contrôleur Colonial** or **Procureur Général** was allowed to be a member of the **Conseil Général** (hitherto known as **Conseil Colonial**) the strength of which was increased from 25 to 30 by the decree of 26 February 1884.*

Laugier became Governor on 23 February 1879 and held the post till 6 April 1881. The introduction of local self-government (12 March 1880) was the most notable reform carried out during his period.** The first municipal elections were held on the basis of limited franchise on 30 May 1880 and Léon Guerre became the first Mayor of Pondicherry with Pochont and Sabapathi Subbarayapillai as his deputies.

Drouhet became Governor after Laugier and remained in office from 12 April 1881 to 13 September 1884, but in-between he was out of Pondicherry for about nine months when Portier and Blainville acted. It was during this period that a progressive group led by Ponnoutambypoullé started working for the emancipation of natives from caste tyranny. It may be recalled that the natives stood relegated to the status of **sujets français***** till 1848 when they were for the first time conferred the right to vote to elect a **Député** to the French Parliament. Jules Godin, the **Député** in France, was called upon to persuade the French Government to bring in the required legislation to enable more Indians to renounce their personal laws and opt to be governed by French civil laws. The decret of 21 September 1881 offered all those above the age of twenty-one, irrespective of caste and religion, the option to renounce their personal laws and to become **renonçants**. These **renonçants** and their descendants came to be governed by civil laws which were so far applicable only to French citizens. Ponnoutamby took the symbolic name of 'La Porte' meaning the door, as he opened the way for the assimilation of the natives with the French. 173 Early in 1882 Hebbard Jacques was elected **Sénateur**.

* The total number of members of the **Conseil Général** was increased from 12 to 25 in the year 1879.

** Lord Ripon and his Local Bodies Act were almost contemporaneous with Laugier and the reforms initiated by him.

*** Their status was inferior to that of **Citoyens Français** (French citizens).

Members of the first list however did not relish the decree of 21 September 1881 which gave rise to a new category of citizens who threatened the privileged position of the Europeans. On the other hand the well-known activities of Ponnoutamby had created among Hindus a reaction which, at first negligible, grew up to become quickly violent. 174 This brought to an end the alliance between Chanemougame and Ponnoutamby. The Europeans who found their position threatened by Ponnoutamby joined hands with Nadou Chanemougame and in consultation with the Congregation of Missions Etrangères formed a new party known as 'Parti clerico-brahmanique'* and decided to sponsor a common candidate to contest the seat for the National Assembly of France.

Nadou Chanemougame soon found that he was strong enough to put up his own candidates. However he was not in favour of a local man as he did not want to share his powers with anyone. Neither had he any preference for any of the professional politicians. Thus on the advice of an astrologer, his final choice seems to have fallen on Pierre Alype, publisher of a weekly journal called 'France d' Outre-mer'. Chanemougame is understood to have written to him proposing his candidature on the specific condition that he should never come to India. Pierre Alype accepted the condition and was elected in 1881 *vice* Jules Godin, the sitting member. Thus all of sudden, Chanemougame became **Grand électeur**, a powerful element in Pondicherry politics.

His task now became very difficult as he had to satisfy the demands of his followers especially the cultured and the learned. These sections of the population could be assuaged only if he could influence the administration and secure all the jobs for them. To consolidate his position, he had to be in fact the servant of those who reposed confidence in him and be the master of the **Député** in France who was commissioned to harass the authorities in France to dismiss or transfer those officials in Pondicherry not liked by Chanemougame. With regard to the low castes his task was more easy. As they did not aspire for Government jobs, it was enough if he could see that they were allowed to carry on their usual customs and religious festivals without hindrance. In 1879 he succeeded in restoring the Fire Walking Festival banned since 1861 following the death of an eight-year old child on the occasion.

* This appellation figures in the proceedings of the **Conseil Supérieur de Colonies** 1883-84.

Upto 1884, elections for the **Conseil Local** and **Conseil Général** were held on the basis of two lists. It was mentioned earlier that the decree of 21 September 1881 had clearly defined the privileges of the **renonçants**. With the growing understanding of their privileged position, the **renonçants** began to agitate for inclusion of their names in the first list. The matter went up to the **Cour de Cassation** which upheld the contention of the **renonçants**. But the French Government was not prepared to include the **renonçants** in the first list as it would have crushed the influence of the 'white' population. Instead they were placed on a separate list by the decree of 26 February 1884 which provided for three separate lists for Europeans, **renonçants** and natives. The first list contained 572 European electors, the second list consisted of less than 2,000 **renonçants** and the third list contained 68,000 natives.¹⁷⁵ Each category of voters had thus one-third representation in the **Conseil Général**, **Conseil Local** and **Conseil Municipal**.

On 21 October 1884 came Richaud who remained in office till 29 April 1886. About this time the French in Indo-China had to undertake naval and military operations ostensibly to punish "Chinese pirates who had assassinated Commandant Rivière" but actually to suppress the resistance to foreign rule. The establishments in India became important centres of refuelling and revictualling for the French. A few coal depots were newly built (1885) on the Pondicherry sea-shore.* In Mahe private land near the river bank close to the sea was acquired for the construction of more coal depots.

The relation between French India and the British Government in India was very cordial during this period. The Duke of Buckingham, Governor of Madras, had visited Pondicherry in December 1879. Almost at the same time Lord Lytton, the British Viceroy in India, paid a visit to Chandernagore. Grant Duff, Governor of Madras, came to Pondicherry in January 1885. Governor Richaud returned the visit soon after. The Maharajas of Mysore, Travancore and Cochin paid official visits to Pondicherry.

The **Député** election fell due on 10 October 1885. Three parties came forward to contest the election. All of them pledged loyalty to the Republic and resolved to work for the social transformation of the establishments. The Europeans made known their programme through a public declaration. The **renonçants** explained their programme in their journal 'Le Progrès'.

* At the southern end of Cours Chabrol.

Chanemougame was, however, too discreet. He neither refused nor promised anything. 176 This time, the European population supported Rouvier. However, Pierre Alype who continued to enjoy the support of Chanemougame was declared elected securing 25,700 votes out of 36,000 votes polled. The candidates sponsored by the Europeans could secure only 9,738 votes.

Manés became Governor on 17 November 1886 and continued upto 24 April 1888. Lord Dufferin, Viceroy of India, paid an official visit to Pondicherry in December 1886. The celebration of the Fire Walking Festival was once again banned in the year 1886. Chanemougame promptly called for the intervention of Pierre Alype, the *Député* in France and got the order reversed.

In November 1888, Piquet took over as Governor but held office for less than a year and was succeeded by Nouet on 25 July 1889. He too remained only for less than a year and a half. Jules Godin, former *Député* was elected *Sénateur* on 11 January 1889, thanks to the understanding reached between those of the second list and the third list. In the *Député* election held on 6 October 1889 Pierre Alype was elected a third time. He secured 25,983 votes while his opponent could muster only 829 votes. The figures showed that the will of Nadou Chanemougame still reigned supreme.

After Nouet came Clément-Thomas (1 February 1891) who was in office till 23 April 1896 with a short break. In the election held on 20 August 1893 Pierre Alype secured 26,175 votes while his opponent Bluysen polled 17,099 votes. In fact there was a split among the Hindus early in 1893. Some of the lower castes led by Sadasiva Naiker, broke away from Nadou Chanemougame and supported the candidature of Paul Bluysen rallying with those of the second list and a big majority of the first list. This alliance did not however yield the expected result.

Clément-Thomas was succeeded on 5 February 1898 by Rodier who continued upto 17 February 1902 with a break. Girod was in office from 31 May 1896 to 27 January 1898. With the establishment of Usine Gaebelé at Mudaliyarpettai in 1892 and the Rodier Mill six years later, the old textile industry of Pondicherry reached new dimensions of growth.

The decree of 28 March 1898 called for the election of a *Député* to the *Chambre des Députés* in France. Everyone expected that Pierre Alype would again be re-elected. Contrary to general expectations, he lost the seat

to Louis Henrique, who was the publisher of the journal "La Politique Coloniale". While Louis Henrique polled 31,776 votes, his opponent, Paul Bluysen secured 17,552 votes. Pierre Alype could muster only seven votes in the election held on 8 May 1898.¹⁷⁷ There seems to have been a secret understanding between Louis Henrique and Chanemougane on the question of paying back to the colony the salt subsidy paid by the British and on the question of electoral reforms to local assemblies.¹⁷⁸

The ministerial despatch of 4 May 1899 which gave an account of the situation in the colony made it known that at least one fourth of the voters of the first list were publicly at the disposal of those offering them better conditions. Almost three weeks before the poll day, a good number of these voters went and stayed in '*maisons électorales*' where they were fed, supplied with alcohol, narcotics, clothes and money. A good amount was promised on the poll day. Candidates used to visit them to ensure that they were satisfied of the treatment offered to them. On the poll day, all those lodged in these *maisons électorales* were taken to the booth one by one, escorted by the election agents. With regard to others, bargain for votes continued until the eve of the elections. Interestingly the despatch blamed the Europeans for all these malpractices.

Referring to the voters of the second list, the despatch pointed out that their number being large, no one could think of bargaining over them. As long as there were two lists, the influence of the first over the second and the subservience of the second list to the first was found helpful to the Europeans. But the hostile attitude of the *renonçants* towards the French and their opportunistic alliances either with the first or third list in various elections were not helpful to them. It is also likely that Nadou Chanemougane also sought for the abolition of the second list. In any case, the decree of 10 September 1899 abolished the second list of *renonçants* for the simple reason that there was no balance between the three elements constituting the population since the minority were placed at the mercy of the coalition of the other two lists. Moreover the entry of the *renonçants* into the first list was made very difficult by imposing severe restrictions.

In October 1902 Laurezac was appointed Governor. He remained in office till 12 August 1904. Lemaire (Jean) took over as Governor on 13 August 1904 and remained in office only till 21 April 1905. Lemaire described as a man of integrity is said to have attracted on this account the

enmity of Chanemougame and Pierre Gaston. He was therefore recalled to France within a few months. The discourse of Etienne Flandin in the **Chambre des Députés** in France on 22 February 1906 will throw some light on how partymen mishandled the administration at that time. "While glancing through the annals of the colony, you will find that in a period of twenty-five years there were in India as many as 30 Governors, 44 **Directeurs de l'Intérieur** and 21 **Procureurs Généraux**".¹⁷⁹ In the months of March and April 1905 French India went even to the extent of having three Governors at a time.....Flandin alleged that "no Governor, no functionary could pull on in India, if he did not submit to the will of that extraordinary personality....Chanemougame together with his astrologer was the real ruler of French India."¹⁸⁰

Joseph François functioned as Interim Governor from 22 April 1905 to 5 October 1906. Gabriel Angoulvant was Governor from 6 October 1906 upto 2 December 1907 to be followed by Charles Rognon (3 December 1907 to 12 June 1908) and then by Adrien Bonhoure from 13 June 1908 to 9 February 1909. J. François ordered municipal elections to be held on 25 November 1905. A replacement was to be provided for Chanemougame, a sitting member vacating his seat at the end of his tenure. Chanemougame himself contested the election. But the Returning Officer did not declare the result alleging various electoral irregularities. Chanemougame appealed to the Administrative Tribunal which declared him duly elected.¹⁸¹ This came as the first symptom of his political decline. It gathered momentum since then to bring about his rout only a few months before his death.

Lemaire had returned to Pondicherry on 2 April 1906. Commenting on his return, the journal 'L' Union Républicaine de l'Inde Française' dated 29 April 1906 remarked that he had come back to contest the **Député** election against Louis Henrique, the sitting **Député** who had the backing of Chanemougame party. Soon after his arrival Lemaire declared: "I will not be the man of any party, the lackey of any personality. As I was in the past a Governor, I shall also be a **Député** in future....." He further declared: "I was inspired by the Democratic Republican Alliance and I take from them the framework of my political programme..... Anti-clerical but not anti-religious; hostile to means of violence-constantly concerned with all round progress".¹⁸² Louis Henrique on the other hand promised a wide range of reforms in the political, social and economic spheres, besides changes in the realm of administration, judiciary, education, agriculture, labour legislation etc. But in the midst of all the din and chaos, Lemaire was declared elected as **Député**.

The party of Chanemougane was otherwise called Pierre-Chanemouganist party because of the close alliance between Chanemougane and Pierre Gaston, a French co-politician. This party held sway for well nigh three decades before Gaebelé party emerged as its rival. Both the parties claimed to be Republican, liberal and progressive and accused the other as anti-republican and reactionary. In 1906, Gaebelé party captured power in the *Conseil Général* by securing the support of 17 members while the Pierre-Chanemougane party could muster the support of only 11 members. It was feared that, having lost support in the *Conseil Général*, the Pierre-Chanemougane party would call for the dissolution of the Assembly with the support of the Governor, the *Député* Henrique and *Sénateur* Godin in France. Their opponents were nevertheless confident of returning to power.¹⁸³ However, the *Conseil Général* did not meet in 1906 to approve the budget for 1907. The draft budget was in fact prepared by the *Conseil Privé* and approved by the Ministry of Colonies. The decree of 6 June 1907 permitted the *Conseil Général* to sit with 23 members alone without waiting for by-elections to replace those who had either expired or resigned.¹⁸⁴ The *Conseil Général* was then summoned to meet on 10 August 1907 to give its approval on certain matters.

The Municipal elections were held in September 1908. The whole atmosphere was surcharged with violence. Lemaire, the venerable ex-Governor and presently *Député*, was assaulted in the course of a fracas by the supporters of Chanemougane. Electoral cards, without which no one could vote on the poll day, were allegedly refused to the partymen of Chanemougane who himself abstained from taking part in the vote. It was alleged that in certain booths the same persons cast votes several times. Gaebelé's party captured a majority of seats. To add to Chanemougane's discomfiture Henri Gaebelé captured the mayorship from Pierre Gaston. This came as the last blow to the reign of Pierre-Chanemouganist party. After thirtyfive years of active political life Nadou Chanemougavelayoudamoudéliar collapsed on Wednesday, the 9 December 1908, after having witnessed a division among Hindus brought about by Sadasiva Naiker and after having lost the mayorship to Gaebelé and *Député* election to Lemaire, persons once despised by him.

Fernand Levecque succeeded Adrien Bonhoure on 10 February 1909 and continued upto 1 July 1910. It was during this period that Subramania Bharathi, then the editor of "India", the Tamil revolutionary weekly published from Madras, arrived at Pondicherry to escape arrest by British police. On 4 April 1910 arrived Aurobindo Ghosh, brilliant intellectual and ardent

patriot from Bengal via Chandernagore. He sought political asylum in French India along with a few friends and was granted. Soon after him came other political patriots like V.V.S. Iyer, Va. Ra. to join the band of 'Swadeshis' in Pondicherry. Political events in Pondicherry from now on take a different turn leading to a new awakening among the local population.

The World War Period (1914-1945) :

Alfred Martineau became Governor on 9 July 1910 and his first tenure lasted less than a year. He returned again on 7 November 1913 and remained in office during the critical days of the First World War. There was a short break between July 1914 and June 1915 when Lejeune was in-charge as acting Governor. Towards 1912 France had lived perilously close to imminent war; Germany had provoked incident after incident like Agadir and Casablanca. A young Serb's successful attempt on the life of the Archduke of Austria at Serajevo was seized upon by the Germans as an excuse for the war against France. On 1 August 1914 France decreed the mobilisation of land and sea forces; the age of recruitment was lowered to seventeen. When the First World War broke out in July 1914, Martineau left for France for consultation and returned only in June 1915. Nearer home the German submarine 'Emden' which shelled Madras ineffectively in September 1914 was expected to attack Pondicherry too. The spectre of 'Emden' caused considerable commotion among the people.

In April and July 1915, new contingents of Franco-Indians and descendants of Europeans were raised and sent to theatres of war in Europe. Measures of economy were undertaken in order to contribute to the war effort and to offer assistance to the families of serving personnel. The difficulties of the population during the war years were accentuated by the disastrous cyclones of November 1916 for whose victims large sums of money had to be earmarked as relief. By the time news of the Armistice reached Pondicherry on 11 November 1918, Martineau had laid down office and returned to France.

Gaebelé began his political career as a member of the **Conseil Général** representing Karaikal. In 1894, he was elected to the **Conseil Général** from Pondicherry.¹⁸⁵ From 1905, he held the seat without break until his death in the year 1936. Gaebelé was not strong enough to capture the mayorship of Pondicherry during the hey days of Pierre-Chanemougame party. However he became Mayor of Ozhukarai Commune in 1894. But shortly after (6 February 1899) he took over from Pierre Gaston, his avowed political rival, the

reigns of Pondicherry Municipality as its Mayor. Again he was elected Mayor on 19 September 1908 and kept it till 15 May 1928. His candidate Flandin was returned *Sénateur* in 1909. He emerged as the most powerful political figure in Pondicherry with the Presidentship of the *Conseil Général* passing on to a member of his party in 1909.

In the *Député* election held on 24 April 1910, Paul Bluysen contested as the candidate of the Brahmanique party and had the support of Pierre Gaston of the Radical party, Nallur Sadasiva Chettiar, Coutiah Douressamy pillai and others. He was opposed by Lemaire said to have been removed from the Radical party. Lemaire's candidature seems to have been supported by Gaebelé, the leader of the Clerical party, Cornet, Vallabadasou, Gnanadicame, Gnanou Diagou and others. The latter was a combination of Muslims, Christians and Europeans. However Bluysen was declared elected to the National Assembly.

Subsequently Paul Bluysen gained the support of Gaebelé and continued to be elected as *Député* until 1924. He was succeeded by Angoulvant (Gabriel) on 11 May 1924 also with the support of Gaebelé

Vallabadassou, an advocate, was another notable political figure very much in the limelight during the second decade of this century. He was elected to the *Conseil Général* in 1911 and held the seat upto 1919. He once supported the former *Député* Lemaire but later turned hostile to Gaebelé and went to the side of Pierre Gaston. As if in retaliation he was suspended for three months from appearing in the court by M. Fabre, President of the Court and son-in-law of H. Gaebelé.¹⁸⁶ Commenting on it, Sri Soudjandrajani reported: "This has been so all the time, the difference is only in the name of the leader of the political party which dragged up its adversaries to public disgrace. After Ponnoutamby La Porte, Louis Rassendrin and Aroquianadin Gnanadicom, it is now the turn of M.D. Vallabadassou."¹⁸⁷

Early in 1918, the Government of British India demanded the extradition of Aurobindo Ghosh and other Indian political leaders. Henri Gaebelé who was the Mayor of Pondicherry, opposed the extradition demand on the ground that the protection of the French flag could not be denied to those who asked for it. The refusal to extradite political refugees from French India was a virtual breach of the Treaty of 1815 by which the paramountcy of the British was recognised in the Indian sub-continent by the French but the British could not do anything about the French stand in view of the improved status of the French in the international arena.

Following the death of Etienne Flandin, Henri Gaebelé was elected **Sénateur** on 17 December 1922. He held the seat only for one year and four months. In March 1924 Gaebelé, who was already a **Sénateur**, was elected President of the **Conseil Général**. On 9 March 1924, Paul Bluysen, formerly **Député**, was elected **Sénateur** polling 70 votes while his opponent Charles Flandin secured 30 votes.

The party of Gaebelé was in power for about 20 years from 1908 upto 1928 by which time French India had almost become the pocket borough of the Gaebelé family. All political and economic institutions came under its influence. Gaebelé came to Pondicherry in 1884 to work as a weaving master (**chef de tissage**) in the Savana Mill on a monthly salary of Rs. 250. He subsequently became the Director of the power house.¹⁸⁸ He was President of the **Conseil Général** and Mayor of Pondicherry. His brother, Albert Gaebelé, was the President of **Chambre de Commerce**. Frits Gaebelé, another brother, was President of the Chamber of Agriculture. When Henri Gaebelé was elected **Sénateur** of French India on 17 December 1922, his son, Robert Gaebelé, succeeded him as President of the **Conseil Général**. As in the past, the practice of manoeuvring elections continued. Henri Gaebelé's will prevailed over the election of **Députés** and **Sénateurs**. Criticized as a staunch supporter of the establishment as against the masses, he monopolised every coveted post, in as much as he was the President of **Conseil Général** Mayor of Pondicherry and President of **Chambre de Commerce**.¹⁸⁹

Nandagobalou Chettiar was one of the staunch supporters of H. Gaebelé. He was a member of the **Conseil Général** from 1911 to 1921. So powerful was he that he boasted in September 1919: "I hold in my hands the reigns of the administration, the judiciary and the police."¹⁹⁰ Powerful all along, he died on 25 April 1922 after a short spell of illness. Paying tribute to him, Gaebelé, President of **Conseil Général**, observed that "beneath the somewhat rude appearance, he concealed an exquisite nature, thorough simplicity and sympathy towards all human miseries and unshakable loyalty..."¹⁹¹

Victory in 1918 not only won great acclaim for the French armies and for the leadership of Foch and Clemenceau but also great gains,—the territories of Alsace and Lorraine in Europe, mandate over Syria, Togoland and the Cameroon, consolidation of the colonies of Asia and Africa. But the inherent contradiction between Republicanism and Imperialism could not be solved; rather they became accentuated in the financial depression of the

post-war years. The emergence of the Communist Party and the radicalisation of the working class actions in the face of growing economic distress created frequent changes in Governments and policies. Not only Metropolitan France but also the French establishments in India inevitably suffered the painful agonies of adjustment to a world that was hurtling towards another catastrophe.

The political climate in France was so unstable after World War I that Governors in French India had very short tenures in office. Between 1919 and 1939 there were no less than 14 Governors and the lengthiest term of office among the 14 belonged to Gerbinis who was Governor for three and a half years from 21 February 1919 on his first appointment. Didelot held the office of Governor from 5 August 1926 to 13 January 1928 and was succeeded by de Guise who held the post till 15 February 1930. Adrien Juvanon who took over from de Guise had a relatively long term from 24 May 1930 to 1 November 1933. Léon Solomiac assumed charge on 15 August 1934 and continued upto 9 October 1936 when H.V. Crocicchia succeeded him. He remained in office upto 11 August 1938.

Just as conditions in France influenced developments in French India so did the conditions in British India. The presence of nationalist exiles from British India in Pondicherry, Chandernagore and Mahe inevitably created the nucleus of anti-French popular movements. The demand for a single list of voters which would necessitate the abolition of reserved seats for Europeans and the descendants of Europeans was one of the earliest planks of the popular movement. The Civil Disobedience Movement launched in 1930 opened the eyes of the French Indian Youths who organised their first Conference in 1931. They held the Second Conference in 1932 which helped to awaken the political and social consciousness of the people. The need for social reforms was stressed and the end of British rule in India was demanded.

In the face of the growing nepotism of H. Gaebelé, a small opposition slowly took shape. Members of this opposition group were often described as subversive elements, as sympathisers of the Congress, Communists or even anti-French by the Gaebelé elements. It was some of these opposition elements which gradually emerged as the Franco-Hindu Party.

From 1927 the political events in Pondicherry started shaping around Rathina Sellane and Thomas Aroul for a short while. 192 R. Sellane Nayagar was one of the important personalities in Pondicherry politics. He was elected

to the **Conseil Général** in the year 1920 and owed allegiance to Gaebelé. Best friend that he was, he turned out to be his worst opponent by 1927. On 19 December 1927 a keen contest was witnessed for the Presidentship of the **Conseil Général** between Thomas Aroul and H. Gaebelé who had, only in 1925, pleaded not to propose his name for Presidentship on account of his old age. Both secured 14 votes each. However, H. Gaebelé was declared elected, being older than Thomas Aroul. Henri Gaebelé was then garlanded by Calivarada Srinivasa Cavounder, Mayor of Ozhukarai. R. Sellane is reported to have made an undemeaning gesture in this connection which provoked a general indignation, followed by violent uproar in the course of which Sellane brandished an ink bottle. His friend Benjamin Thiroux hit a plate on the head of a person, causing a serious wound.¹⁹³ Selvaradjalu Chettiar's motion to record the happenings in the proceedings of the Council was adopted.¹⁹⁴ Following the exchange of blows and other acts of violence, the **Conseil Général** resolved to request the Governor to dissolve the **Conseil Général**. This, however, was not done.

In close association with Thomas Aroul, Sellane's party contested the municipal elections on 13 May 1928 when for the first time Gaebelé's party suffered a set-back. However, after partial renewal of the Assembly on 10 June 1928, Thomas Aroul was elected **President** in the changed political situation.¹⁹⁵ This marked the first success of the Sellane-David combination which came to be known in course of time as the Franco-Hindu Party. In the **Député** election held on 19 April 1928, J. Coponat who enjoyed the support of David and Sellane was declared elected defeating Gabriel Angoulvant, the sitting-member by a majority of more than 38,000 votes.¹⁹⁶ **Sénateur** Paul Bluysen passed away on 10 September 1928 necessitating a mid-term election. In the election held on 9 December 1928, Dr. Eugène Le Moignic who also had the support of David's party was elected. This was another blow to the Gaebelé's party. The era of Henri Gaebelé had practically ended.

The Franco-Hindu party popularly known as David's party held sway for about ten years from 1928, when Joseph David was elected to the **Conseil Général**. He was related to Vallabadassou, a staunch opponent of Gaebelé in the past. David came under attack when he opposed the candidates sponsored by Gaebelé. In 1928 a draft labour legislation approved by the **Conseil Général** was sent to France for the approval of the Ministry. This was, however, filed as "prématuré". The condition of the agriculturists was not seriously looked into. The Franco-Hindu party had therefore to face the indignation of both agriculturists and labourers. However, in order to strengthen its position

the Franco-Hindu party had to depend on the support of civil servants who in turn were benefited by the policies of the Franco-Hindu party. In 1934, David was again elected to the **Conseil Général**. A year later, he was elected Mayor of Pondicherry.

On 6 December 1933, the members of the Youth Organisation launched the Harijana Seva Sangham. A number of reading rooms and night classes were started. The members of the Harijana Seva Sangham who had to work in the interior villages saw the plight of the mill workers living in these areas. This prompted them to organise the workers in the villages to fight against their exploiters. Trade-union cells were thus formed *incognito* as workers were not free to organise themselves into trade-unions.

In June 1936, the workers declared a general strike demanding eight hours' work, the right of collective bargaining, increase in wages, holidays and the right to form trade-unions. The Administration agreed to all their demands except the right to form trade-unions. The workers went on strike again in the last week of July 1936. The attempt to evict the workers resorting to a stay-in strike by force on 30 July led to violence and shooting in which 12 workers lost their lives. It may be recalled that it was only in June 1936 the **Front Populaire** was swept to power in France. This had given rise to great expectations among the working class not only in France but also in Pondicherry. The coalition government in France ordered an immediate enquiry and took action against the Governor. **Senateur Justin Gaudart** came to Pondicherry as a special envoy of the President of the French Republic to study the problems of workers here. On his recommendation the *décret* of 5 April 1937, hailed as a workers' charter, was passed.

The Mahajana party sponsored by Marie Savery, Dorairaj and Purushothama Reddiar grew up very soon to challenge the position of the Franco-Hindu party in the elections for the Municipalities, **Conseil Local** and **Conseil Général**. The party wanted to do away with the powers of the Governor under the **Ordonnance Organique**, to remove the existing anomaly of "two list-voter-system" and to ensure the conduct of free and fair elections.

The Franco-Hindu party and the Mahajana Sabha contested the Municipal elections on 2 May 1937. The rivalry between the Franco-Hindu party and the Mahajana Sabha left the territory in the grip of violence. The Franco-Hindu party was declared as having won the election. The Mahajana Sabha disputed the veracity of the results. The territory passed through a

period of violence and political gangsterism in which the ruling party was alleged to have made free use of the police force and the government machinery to suppress all remnants of opposition.

The Municipal elections were followed by elections for the **Conseil Général** on 10 October 1937. On the eve of the elections Governor Crocicchia invited Selvaradjalu Chettiar, a retired politician who owed allegiance to Gaebelé's party to sponsor some candidates and promised his support. The latter hesitated because of his political enmity with David who had reportedly driven him out of Pondicherry during the period of Governor Juvanon. But on the eve of elections Selvaradjalu Chettiar joined hands with David. Nevertheless, the Mahajana Sabha gained in Karaikal while the Franco-Hindu party came out successful in Pondicherry.

Having lost the elections (10 October 1937) the Mahajana Sabha launched a non-co-operation movement. It established Gram Panchayats, sealed the Civil Registries, disregarded the orders of the police and the judiciary, even substituted themselves to these institutions in some places. They also refused to pay taxes. The administration almost came to a standstill and the government was left with no other alternative than to negotiate with the members of the Mahajana Sabha. The Government conceded to conduct free and fair elections. But the political situation in France had in the meanwhile changed with the fall of the coalition government. Consequently the assurance given to conduct free and fair elections was thrown to the wind. The political atmosphere had become so contaminated by acrimonious rivalry that the eruption of political violence was always found imminent. Restlessness followed. The administration resorted to a policy of repression against workers and the working class movement.

Bonvin took over as Governor from Crocicchia on 26 September 1938. Soon after his arrival, a climate of peace was sought to be created to facilitate the return of those families which had to leave the territory out of fear. Justice was assured in disputes between workers and the management. Cases filed against them were withdrawn. Marie Savery helped to bring about this process of understanding. On 16 December 1938, Selvaradjalu Chettiar, one of the members of the **Conseil Général** was shot and killed. Shortly before, Joseph David was fired upon and wounded by unknown assailants who could not be apprehended. These violent and desperate outbursts indicated only the simmering cross-currents of the body politic.

On 26 December 1938 David gave an account of his mission to France, on the floor of the **Conseil Général**. He also dealt with in detail the problems of French India and suggested ways to solve them. The problem, according to him, arose out of social and economic mal-adjustments. The young educated had no jobs. The local officials were under-paid; so were the workers. There was no scheme to assist the orphans, abandoned children and the aged; commerce was sluggish and industry was seriously threatened. The weavers were left in a sad plight. Cultivation of rice and ground-nut was not remunerative. He charged that the economic crisis was exploited by the agitators, which led to the tragic events of October 1937 and May 1938 costing the lives of many innocent people. After tracing the causes for the illness, he defined the framework of his policy. In the realm of administration, he said, he would adopt a policy of social appeasement, while coming down heavily on subversive attempts, ensure economy in the expenditure over personnel belonging to the **cadre métropolitain**. By way of social reform he promised to reorganise the system of education, devise schemes for the benefit of orphans, the aged and job-seekers. He also promised to amend the labour legislation of 6 April 1937, taking into account results achieved and defects noticed, to review the customs convention, and improve and develop irrigation works.

By now the government in France had become riddled with secret Nazi and Fascist sympathisers; notorious quislings like Pierre Laval and defeatists like Paul Reynaud had become leading ministers and under them the administration had become riddled with German agents. The Second World War which began in September 1939 damaged the reputation of France even in the initial months of the war; the names of quislings like Pétain and Laval stirred gruesome memories of French degradation.

The period from 1939 to 1942 when Joseph David was the President of the **Conseil Général** continued to be a turbulent one. Social and political privileges determined on the basis of colour came to be universally opposed in French India. During Joseph David's presidentship of the **Conseil Général**, that body passed a resolution demanding the European Club in Pondicherry to admit all French citizens without distinction of race or colour. Nevertheless, the World War II period saw the decline of the Franco-Hindu party and the emergence of the National Democratic Front which came to consist of the Communists, the Socialists and also the members of the **Combat**.*

* The **Combat** was organised in Pondicherry by Julien Adicéam who came from Algeria.

In 1939, V. Subbiah, a popular labour leader, was arrested by the British Government and interned in Vellore Jail. The Communist organisations in the French establishments were banned on 28 September 1939 and the 'Press' was subjected to censorship. Indian nationalists including P. Jeevanandam were declared as undesirable and expelled from the Territory. The **arrêté interministériel** of 4 October 1939 which provided for the liquidation of the assets of the banned Communist organisations was promulgated on 14 November 1939. Following the lifting of the ban on the Communist party in 1940 Subbiah returned to Pondicherry. Louis Bonvin was exposed in 1940 when he spoke in support of Pétain who had signed an armistice with Hitler and brought unoccupied France on the side of Nazi Germany. However, the fear of British Indian military action compelled Louis Bonvin to proclaim support for **France Combattante** (Fighting France). Young men from French India joined the forces of De Gaulle's Government in exile and added their names to the ranks of heroes of Bir Hacheim in 1942. It was now that the expression "partent pour De Gaulle" (to join De Gaulle) became popular in Pondicherry. More than a thousand were enrolled by 1943.¹⁹⁷ Measures were taken for civil defence against aerial bombardment. The burden of war became too heavy that it led to the imposition of taxes, including taxes on match-box and income, the cancellation of many schemes and construction works and the rising spiral of prices. Rationing of essential supplies was introduced to counter the rise in prices.

In 1943 the **Conseil Général** elected one of its members, Zivarattinam, an advocate of Pondicherry, to represent French India in the Consultative Assembly at Algiers. Soon after his election, the **Conseil Général** accepted his motion to send a telegraphic message to the President of the National Liberation Committee in Algeria in which were expressed ardent wishes "for the restoration of the French Empire in its sovereignty and grandeur". In 1944, when Zivarattinam addressed the Consultative Assembly in Paris, he demanded a single list of voters and called for the abolition of the reserved seats or separate electorates for Europeans and the descendants of Europeans. In April 1944, V. Subbiah was charged as an undesirable element and expelled from Pondicherry. But the sudden death of Joseph David in 1944 brought to an end the sway of the Franco-Hindu party soon after.

Post-War Period (1945-47) :

Louis Bonvin returned to France in July 1945 handing over charge to Jeandin. On 23 August 1945, the separate electorates were abolished and a single list of voters was enforced in French India. In September 1945, the externment order against Subbiah was withdrawn enabling his return to

Pondicherry. In October 1945, elections were held throughout French India to elect a member for the National Constituent Assembly in France. Zivarattinam won with 22,171 votes out of 43,414. The Commission for French India of which he was made the Secretary recommended that women in French India should be given the right to vote as soon as that right was extended to women in France.

François Baron became Governor on 20 March 1946. In the elections held for the Municipal Councils on 23 June 1946, the National Democratic Front was able to capture all the Municipalities.¹⁹⁸ The election manifesto of the National Democratic Front proclaimed itself in favour of French India remaining fully a self-governing National Unit within the French Republic (**Communauté Française Républicaine**). It demanded adequate representation for French India in the representative organs to be newly formed in France.

Sensing the growing clamour among the people, the French Government came up with certain reforms in an attempt to appease the politically volatile elements. The decree of 25 October 1946 replaced the 30-member **Conseil Général** with a 44-member **Assemblée Représentative**. Its members were to be elected on the basis of adult suffrage. 15 December 1946 was fixed as the date for holding the first election to the newly established **Assemblée Représentative**. The candidates of the National Democratic Front were overwhelmingly returned to the Assembly. Even in the election held on 10 November 1946 to elect one **Député** to the **Assemblée Nationale** in Paris, Lambert Saravane, the candidate backed by the National Democratic Front, came out successful.

The newly elected **Assemblée Représentative** met on 6 January 1947. In the same session Subbiah and Paquirissampoullé were elected **Sénateurs** to represent the French Establishments in the **Conseil de la République** on 26 January 1947.

Shortly after Lambert Saravane, Counouma, André, Mouttoupoullé and Goubert dissociated themselves from the radical slogans of the National Democratic Front, without however breaking away from the front. In July 1947 some of the partners in the Front broke away completely and formed the French India Socialist Party. The dominant figure and the driving force of the new party was Goubert. Having broken away from the Front, the French India Socialist Party launched a systematic campaign against the Communists who until now dominated the National Democratic Front. In a similar political metamorphosis, the favour of the French Administration also came to be bestowed on the French India Socialist Party.

The year 1947 also witnessed a series of constitutional reforms. The decree of 12 April 1947 created a **Conseil de Gouvernement** with the Governor as President and seven members of whom five were officials and two were to be chosen from the Representative Assembly. The **décret** of 30 June 1947 creating the autonomous unit of Chandernagore headed by an Administrator was promulgated by the **arrêté** of 26 July 1947. However, the **décret** was subsequently abrogated.

The decree of 12 August 1947 provided for a **Conseil de Gouvernement** headed by the Governor and six members of whom at least three were to be elected by the Representative Assembly and the other three to be nominated by the Governor. However with the proclamation of India's freedom on 15 August, 1947 the freedom movement gathered momentum. Addressing the second session of the **Assemblée Représentative** on 15 September 1947, Baron declared that he was happy to be the last Governor of French India and the first **Commissaire de la République**. But these statements repeated by the Commissaires who came to represent the French Republic were not enough to meet the democratic aspirations of the people. At the same session Governor Baron revealed that with the experience gained from Chandernagore, France was thinking in terms of granting more autonomy to the various French establishments in India by conferring on them the status of free towns linked to a federal set-up. Chandernagore was declared a free town with a 25-member **Assemblée Municipale** by the decree of 7 November 1947. All these measures did not wholly satisfy those who sought freedom from foreign rule. While the British finally accepted the inevitable and left, France could not yet reconcile itself to abandoning her possessions in India.

IV. The freedom movement

Pondicherry Region:

Although political conditions in the French Indian establishments were different from British India, the people here showed considerable zeal for freedom from French rule and to become an integral part of the Indian Nation. While the origin of the Harijana Seva Sangam in 1933* and the Mahajana Sabha in 1938 † were symptomatic of the impact of the teachings of Mahatma Gandhi, the activities of these organisations at once revealed the growing national consciousness and the political awareness of the people. The visits of Mahatma Gandhi in 1934 ‡ and Pandit Jawaharlal Nehru in 1936 to Pondicherry were significant in the sense that such visits brought the politically conscious elements into close contact with the freedom movement of India. The residence of

* 6 December 1933. † 26 March 1938.

‡ 17 February 1934.

V. Subbiah at Vellala Street was placed under surveillance. The activities of one Ramanathan Pillai of Madurai who had reportedly undergone 15 months imprisonment in 1922 for participation in the civil disobedience movement and the activities of one P. Thanikatchalam Pillai of Puduppalaiyam who was for some time Secretary of the South Arcot District Congress Committee were found detrimental to public interest and they were banished from the French establishments in September 1937. Thus the spread of nationalist sentiments in the French Indian territory was sought to be restrained.

The year 1946 stands out as a turning point in the history of the freedom movement in Pondicherry. It was on that year a group of politically conscious young men formed the French India National Congress. This group which included J. Savarinathan, T.N. Sethuraman Chettiar, Ambadi Narayanan, Govinda Pathar and M. A. Annamalai decided to follow the footsteps of the Indian National Congress. In due course, the activities of this organisation came to be guided by R. L. Purushothama Reddiar, S. R. Subramanian, Ansari Dorai and Zeevarattinam. A band of youngsters which included among others Antoine Mariadassou, Sebastien, D. Mounissamy and Arumugham formed the French India Students Congress on 17 August 1946 to mobilize the younger elements to fight for the cause of freedom. Another organisation called the Students' Federation came to be established on 6 March 1947 to organise the support of the younger elements to the Communist Party in its political campaign.

In October the same year a rival Congress group called the All French Indian Congress came to be formed under the leadership of Muthu Venkatapathy Reddiar and C. A. Rathinam. There were no apparent ideological differences between the two Congress groups. A piquant situation, however, arose when the new organisation called 'All French Indian Congress' was scheduled to be inaugurated on 30 September 1946 by M. Bhaktavatchalam who was then a Minister in the Madras Government at a function to be presided over by K. Kamaraj. In the midst of these happenings there developed a controversy between these two organisations. The old organisation claimed priority and did not want the Tamilnad Congress to support the new one alleging that it was communist sponsored, while the new organisation questioned the national character of the older one.¹⁹⁹ While this controversy was going on, the French India Government by an order prohibited foreigners from addressing public meetings in the French territory.²⁰⁰ It also came down heavily on the Press. The entry, sale and distribution of the Madras Journal 'Dinasary' and other tracts of political nature were banned on 19 October 1946.

About the same time, the news that the British had finally decided to quit India on 15 August 1947, after granting full independence to India brought about a new awakening among the people in Pondicherry and spurred them on to action. The people of Chandernagore launched a satyagraha. In Pondicherry the French India Students' Congress announced a public meeting on 9 August 1947 to demand the French to quit India here and now as the people were thirsting for reunion with their own kith and kin of the Indian Union. Sensing the growing tempo of popular resentment, the Administration banned the public meeting just on the eve of holding it. ²⁰¹ In a spontaneous reaction, the French India National Congress, the Students' Congress, the Communist Party and various trade-union organisations came out to register their protest against the ban order. Mill workers went on strike, students abstained from classes, and a general hartal was observed in the town. Over 150 people were arrested in Pondicherry during the two days of Quit India demonstrations. Public reaction to the ban order was so great that the Administration considered it prudent to rescind the same. ²⁰² The meeting which was then duly held on 10 August at Nehru Vanam* adopted a resolution demanding merger with India. S.R. Subramanian of the French India National Congress addressed the mass meeting which was presided over by Rajan Das of the French India Students' Congress. ²⁰³ The demand for freedom became so widespread in all the establishments that Governor Baron flew to Calcutta where Gandhiji was stationed and persuaded him to intercede and have the agitation stopped on the plea that the French were shortly to enter into negotiations with the Government of India. Mahatma Gandhi in the course of his post prayer speech on 17 August disapproved the satyagraha movement and chided the satyagrahis as duragrahis. He declared that this was not the time for satyagraha and added that Pandit Jawaharlal Nehru was there to look after such affairs. ²⁰⁴

The French Administration then came up with a few reforms to contain the democratic aspirations of the people. The **Conseil Privé** was replaced by a **Conseil de Gouvernement** (Council of Government) by the decree of 12 August 1947. The decree of 20 August 1947 replaced the Governor with the **Commissaire de la République** and stated that he would give direction to and exercise control over the public services in the French establishments in India. The Commissioner continued to function as the President of the

* A coconut grove by the side of North Boulevard in Pondicherry town.

Council of Government as previously in the case of the *Conseil Privé*, but functioned under the advice of the Councillors who were to be elected by the Assembly. Except on subjects like judicial service, police and law and order, which the Commissioner reserved to himself, on all other matters, orders could be passed by the Commissioner only in the Council of Government or in consultation with the Councillors. Draft *arrêts* were countersigned by the concerned Councillor only after being considered by the Council of Government which consisted of six members, three of whom were to be elected by the Representative Assembly and the other three to be appointed by the Commissioner.*205

The French India Communist Party which had till now advocated Union with France with the ultimate object of fusion with India changed its stance in 1947 and demanded immediate merger with India.

V. Subbiah, Senator for French India and leader of the Communist Party, criticised the reforms envisaged by Governor Baron regarding the composition of the Council of Government and called upon the people of French India not to accept any settlement except on the basis of complete transfer of French Indian territories to the Indian Union. 206

The Communist Party issued an appeal to all the Municipalities to haul down the French flag and to hoist the Indian National Flag on 15 August. Discontent with French rule and the desire for merger with India was so widespread that the Bar Associations of Pondicherry and Karaikal passed resolutions on 30 August 1947 calling for the integration of the French establishments with India. 207 The Indian National Congress appealed to the people of French India to remain patient until the issue could be settled by mutual agreement. Soon after, the Government of India publicly announced that negotiations were in progress with the French Government.

* In practice, however, all the six were elected by the Assembly. The first Council of Government was constituted on 27 September 1947. Those elected were: S. André (Public Works and Health), P. Counouma (Finance and Education), Deivassigamany (Revenue), Goubert (General Administration and Labour), Latchoumanasamy (Agriculture and Information) and Sivassoupiramaniapoullé (Civil Supplies).

In January 1948* the French India National Congress held a two-day People's Convention at Nehru Vanam to decide the future of French India, which was attended by more than two hundred delegates carrying with them the mandates of more than fifteen thousand citizens above the age of eighteen. The Convention which was presided over by R.L. Purushothama Reddiar called for the unconditional withdrawal of France from the establishments and conveyed its determination to achieve its merger with the Indian Union to which it had close ethnic, cultural, economic and linguistic links. The Convention did not approve the idea of holding a referendum in the settlements as it felt that it would amount to an insult to the people. While welcoming the talks between France and India, the Convention called upon the people to be ready to fight, if need be. 298

Early in March 1948, the Government of India gave notice to the French India Administration of its intention to terminate the Customs Union on the plea that conditions had changed since the agreement was signed in 1941.** No reply was, however, received till the end of February 1949. On 8 June 1948, the terms of an Indo-French Agreement to settle the future of these areas were announced. It was agreed that the future status of the French territories should be left to the decision of the people concerned, their wishes being ascertained by means of a referendum. 299 The modalities of the referendum were left to be decided by the Municipal Councils of all the settlements. The referendum was agreed to by the Government of India, in deference to the contention of the French Government that under Article 27 of their Constitution (1946) any transfer of French Territory or any change in its status could be effected only with the consent of the people concerned which expression was construed to mean a referendum.

As a gesture of goodwill, the Government of India offered to continue the Customs Union Agreement until the completion of the referendum. However, the June Agreement came in for criticism from several quarters. Some expressed surprise over the fact that the Government of India should have

* 24 and 25 January 1948.

** The Customs Union Agreement was signed between the British Government and the French Indian Authorities in 1941. Under this Agreement, in return for the payment of an annual subsidy of Rs. 6.2 lakhs by the Government of British India to the French Indian Administration, the latter handed over the customs jurisdiction over the area to the British Government. Thereafter, for purposes of import and export and Customs Regulations, French India became virtually a part of India. The Agreement was liable for termination on a year's notice.

entered into an agreement which was full of loopholes and so vague. Another section supported a plebiscite under joint Indo-French auspices to ascertain the wishes of the people. The French were perhaps aware of the obvious advantages in holding the Municipal elections, as it would arouse every kind of party and personal passions, thereby dividing the people and weakening the movement fighting for the merger of the establishments with India. Many of the pro-mergerites were, however, sore over the fact that the Government of India had not taken into its consideration the well-known factors of internal politics in Pondicherry.

As a preliminary to the referendum, fresh elections were proposed to be held for all the Municipal Councils. Early in August 1949, the Municipal elections were held in Chandernagore where the Karma Parishad captured 22 out of the 24 seats. The Municipal Councils in Pondicherry alone had in all 102 seats—84 from the seven communes surrounding Pondicherry and 18 from Pondicherry town. In all 250 candidates contested—the French India National Congress fielded 84 candidates, the French India Socialist Party 102 and the Progressive Democrats 64. 210

Tension mounted in Pondicherry even as early as in September 1948 when the police arrested *en masse* 120 student processionists for defying the ban and the merchants responded to a hartal call given by the French India National Congress. Ambassador Daniel Levi, however, took pride in the fact that French Indians enjoyed adult suffrage. Commenting at a press conference on the demand to have observers from the Indian Union at the time of the elections, he remarked, "Whether observers come from the Indian Union or the sun or the moon, we should set an example to the whole world by conducting the elections and the referendum with absolute fairness and in the best democratic manner". 211

In spite of such assertions, election in Pondicherry had come to be regarded as nothing better than a political fraud played upon the people as no party which was in opposition to the Government had ever succeeded in winning an election. Terrorism and police intervention were inseparable from elections. The prevalence of these ugly practices was not only a matter of local experience, but had also been brought to light by the French Parliamentary Commission. Writing in his paper *L'Aube* as early as in March 1947, Maurice Schuman, President of the M.R.P. (*Mouvement Républicain Populaire*) observed that the annals of the whole world had never revealed facts so scandalous as elections in Pondicherry. 212

Elections in Pondicherry were scheduled to be held on 10 October 1948. In the meanwhile, the ruling clique in Pondicherry brought pressure on government officials not to associate themselves with the merger movement. Propaganda was carried on under high auspices among ex-servicemen, government servants and pensioners to the effect that India will not honour her obligations towards them in the event of merger. The Administration took stern measures against the Students' Congress. Paramel, President of the Students' Congress and Antoine Mariadassou were sentenced to one month's imprisonment. D. Mounissamy, editor of *Jeunesse*, a journal which espoused the cause of freedom was sentenced to eight days' imprisonment.²¹³ The political atmosphere in Pondicherry turned so violent and tense, it was feared that elections would not be free and fair. On reports received from here, the Government of India moved in the matter and requested the French Government to postpone the elections. The French Administration which had initially agreed to postpone the election to a later date till an atmosphere of complete security was restored, suddenly announced that the elections would be held on 24 October 1948. In the meanwhile, a split had developed in the Socialist Party on this issue. One group consisting of André, Counouma and Latchoumanassamy were against holding the elections without arriving at an agreement with the Government of India. The other group consisting of E. Goubert, Deivassigamany and Sivassoupiramaniapoullé insisted on holding the elections as scheduled on 24 October. Governor Baron exercised his casting vote in favour of Goubert's group. Commenting on the action of the Governor, Lambert Saravane, the French Indian Deputy in the French Parliament said that he had "violated all democratic principles" by "utilising his casting vote".²¹⁴

The election campaign having been set in motion, leaders of various political groups began airing their views. Mouttoupoullé, who was then Mayor of Pondicherry, extended his support to the Goubert faction. Mouttoupoullé contended that the task of the new Municipal assemblies had been considerably reduced to the simple question of fixing a date for the referendum. But nevertheless, he regretted the fact that the Governments of France and India had come to an agreement without consulting the people of French India. Goubert took the stance that the Socialist Party could not commit itself to any definite line regarding the future of French India because, he said, this question should be decided by the people themselves. The Communist Party

of India called upon the French Indian Communists to vote for merger with India. However, the latter decided to maintain the political line laid down by their Party's Central Committee on 16 June.

Lambert Saravane, leader of the French India Independent Party, declared that his party would boycott the elections. In a statement to the press he explained that since his efforts to have a common front against reactionary and non-progressive forces have failed, he had decided to keep away.²¹⁵ Kamaraj, President, Tamilnad Congress Committee visited Pondicherry and held discussions with R.L. Purushothama Reddiar, President of the French India National Congress and Peroumal, President of a splinter group of the Congress on the political situation. Kamaraj's efforts at narrowing down the differences between the two groups of the National Congress helped to strengthen the French India National Congress.

As the French Indian Administration was bent on going ahead with the elections, the Indian National Congress decided to send its observers to all the four establishments to watch the situation during the elections. (Dr.) N.V. Rajkumar, Secretary of the Foreign Department of the A.I.C.C. and (Dr.) P. Subbarayan were deputed to Pondicherry. The Provincial Congress Committees of Tamilnad, Kerala and Andhra Pradesh were instructed to depute their representatives to Karaikal, Mahe and Yanam respectively.

Three parties were left in the fray: the French India National Congress, the French India Socialist Party and the Progressive Democratic Party, the last included the Communist Party of French India and the Dravida Kazhagam. The A.I.C.C. observers reached Pondicherry on 23 October, and it was reported to them that the authorisation cards were not issued to most of the assessesurs (polling agents) nominated by the Congress candidates. They could hardly do anything to set right matters.

On election day it was noticed that in most of the bureaux de vote (polling booths), the assessors of the Congress Party were kept away by devious means. Polling was very poor at almost every booth; voters were intimidated by anti-social elements; ballot papers of some of the contesting parties were

removed from the booths. Added to all this, there were several instances of misuse of voters' identity cards. Only a small percentage of women voters chose to exercise their franchise. Some of the Congress candidates were targets of assault by the Socialist Party workers. The **Presidents** (Presiding Officers of the polling booths) of almost all booths belonged to the French India Socialist Party, and the **Presidents** in several cases were themselves candidates for elections. All this was enough to prompt (Dr.) P. Subbarayan, the A.I.C.C. observer to warn the Government of India not to recognise the elections in French India for the purpose of determining the desire of the people for union with India. In any case, when the elections were over and the results announced, the Socialist Party reported cent per cent success. Even Laugenie, the French Government representative who came to Pondicherry at the time of the elections to report to his Government on the election, stated that these elections had not carried the matter any further, and a referendum would not solve the problem. He further felt that the idea of a referendum must be given up and advocated a form of tripartite conference to settle the issue. 216

While declaring open the French India Assembly on 20 November 1948, Governor Baron came up with a novel proposal under which the French establishments in India were to form part of the newly created French Union. By way of amplification he said, "Pondicherry in the Indian Union is exactly a dead loss for the world. Pondicherry—I say Pondicherry to signify an Indian town within the Indian Union,—is as much for India as for France, a link for friendship and progress."

Governor Baron's plea for the continuance of the establishments under French rule came under strong criticism among leaders of the French India National Congress. R.L. Purushothama Reddiar, President of the French India National Congress in a press statement said, "that the people of French India are Indians first and Indians last", and demanded the immediate withdrawal of the French. It was a pity, he said, "to see the Governor pleading for the acceptance by French Indians of the masked sovereignty of France, under cloaks of friendly links and cultural contacts, in the same breath in which he says, the time of domination is over". 217 Baron could not, however, stay long to see through the fruition of his plan. The decree of 1 December 1948 recalled him to France and appointed Maurice Thomas, Secretary General of French India as acting Commissioner of the Republic.

On 19 December 1948, India's attitude on the question of the French and Portuguese pockets in India was made clear in what has come to be known as the Jaipur Resolution of the Congress. It stated, "with the establishment of independence in India, the continued existence of any foreign possession in India becomes anomalous and opposed to the conception of India's unity and freedom. Therefore, it has become necessary for these possessions to be politically incorporated with India, and no other solution can be stable or lasting or in conformity with the will of the people. The Congress trusts that this change will be brought about soon by peaceful methods and the friendly co-operation of the Governments concerned." 218

Some time later the Government of India introduced a permit system regulating the movement of people between the French establishments and India. Late in March 1949 the French Indian Administration proposed some modifications in the 1941 Customs Union Agreement which, however, lapsed on 31 March. This must have come as a blessing, for it facilitated an unrestricted flow of foreign goods into Pondicherry. This, in due course, gave rise to smuggling of a vast quantity of foreign goods across the border to India. Pondicherry soon became a smugglers' paradise for diamonds, gold, cycles, silk, perfumes, pens, watches etc., which helped mainly to enrich themselves.

In the meanwhile the Municipal Councils met on 21 March 1949 and decided the modalities of the referendum as proposed under the June 1948 Agreement and fixed 12 December 1949 as the date for holding it. In Chandernagore, the Karma Parishad (Party) which had captured almost all the seats in the Chandernagore Municipal Council passed resolutions favouring merger with the Indian Union even without a referendum. However, as the French Government insisted, it was held on 19 June 1949 and the people of Chandernagore overwhelmingly (99%) voted for merger with India.* 219

* On 2 May 1950, the Government of India took over the *de facto* administration of Chandernagore. The Indo-French treaty for cession of Chandernagore was signed in Paris on 2 February 1951. The *de jure* transfer took place on 9 June 1952.

The National Liberation Front* of Pondicherry decided to celebrate the occasion and declared 26 June 1949 as Chandernagore Day. The March meeting of the Municipal Councils had also decided to send a delegation to Delhi and Paris to ascertain the attitude of the respective Governments. Besides E. Goubert, the delegation consisted of Carnindiramoudéliar, Councillor for Finance and Emmanuel Tetta, Secretary of the Finance Bureau. Tetta was subsequently excluded from the delegation for his role in the Chandernagore Day Celebration by a decision of the Council of Government Balasoupramanien, President, French India Representative Assembly and a member of the Pondicherry Municipality replaced him. The three-man delegation left Pondicherry for Paris on 11 July 1949. 220 It obtained from the French Government, the assurance of an autonomous status for the establishments within the framework of the French Union. The Government of India on the other hand assured Goubert, that in the event of merger, changes in the administrative set-up of the settlements would be carried out only in consultation with local public opinion.

On their return, a meeting of the Municipal Councillors of the four establishments was held on 17/18 October 1949 in Pondicherry under the chairmanship of K. Mouttoupoullé, Mayor of Pondicherry. A set of resolutions was passed laying down certain basic conditions, resulting in the indefinite postponement of the referendum. The Joint Session of the Municipal Councils at the same time accepted the autonomy offer of the French Government and urged the people to accept it. The speed with which the Municipal Councils accepted the French offer of autonomy confirmed intense behind-the-scene political drama staged in all the four establishments to secure unanimous acceptance of the French offer.

Meanwhile, a false impression of the policy of the Government of India was sought to be created in the minds of the people of Pondicherry. In a press communique issued on 27 October 1949, the Government of India declared: "There seems to be some misunderstanding with regard to the policy and intentions of the Government of India concerning the future of French Settlements in India in the event of their deciding to join the Indian Union.

* The National Liberation Front avowed itself to bring together all the nationalist groups in Pondicherry which stood for merger with India without jeopardising their separate political ties and group affiliations.

The Government of India have decided that in that event French possessions in India will be administered as autonomous units in direct relations with the Central Government. Any changes in the administrative set-up will be carried out only after consulting local public opinion. The special linguistic and cultural interests of the people will be preserved. The Government of India will provide adequate funds for carrying on the administration of these possessions. The existing financial commitments of the French administration will be taken over by the Government of India".²²¹ This was the first occasion when the Government of India came out with an official statement of their policy in regard to the future of the French India settlements.

The year 1950 will long be remembered in the areas as a year of arson; 125 houses of pro-merger supporters were burnt in Pondicherry alone, among these was the office of the Communist Party of Pondicherry. A team of Neutral Observers appointed by the International Court of Justice at the instance of France came to Pondicherry in April 1950. They practically substantiated the charge that organised political violence flourished as a profession in the establishments. Jean Rous, a noted French writer said in '*Franc-Tireur*' dated 26 December 1950: "In this small colony as in the others, there is a party which is ludicrously called the Socialist Party which has christened its privileges and profits French sovereignty and which indulges in a frenzied blackmail and is free to go tomorrow, with bag and baggage with the clan of adversaries of the French culture", and added, "It is likely that a few frenzied individuals would like to forcefully have a referendum in the Algerian or Oriental fashion intended to ensure the victory of France. But such a victory would be the defeat of what can still be saved: our cultural effulgence".²²²

On 17 June 1951, Goubert got elected as French India *Député* to the *Assemblée Nationale* securing 90,053 votes out of 90,667 votes polled. The election result caused a lot of surprise all round. About this time the Indian Government withdrew the warrant it had served on V. Subbiah in 1948. Since then the freedom movement in Pondicherry gathered momentum under his leadership. *Swadandiram*, a Tamil weekly published from the border areas served as the chief organ of his movement. In a press statement he said that the Communist Party of French India will forge a united front with all democratic forces in French India to fulfil the historic task of liberating it from French domination and its re-unification with India.²²³ Prime Minister Nehru, denounced at a public meeting in Madras, the violence prevailing in the establishments and said, "there is an end of the plebiscite business now".²²⁴

A fresh wave of terrorism swept over Pondicherry, following the formation of the French India Labour Party by André Gaebelé in opposition to the French India Socialist Party which was in power. About this time (Dr.) Perry, a member of the Assembly of the French Union, Paris characterised as shameful the policy of the French Government, playing into the hands of the Socialist Party which has absolutely no faith in civilised administration and whose main creed is goondaism. 225

Towards the end of October 1953, Kewal Singh took over as the Indian Consul General in the French establishments succeeding R. K. Tandon. Early in January 1954, steps were afoot to launch a mass campaign in favour of merger with the Indian Union. Saravane, a former member of the **Conseil de la République** in Paris commenting on conditions in French India, said that they had now in French India a Government which was humiliating even to Frenchmen and called upon the pro-merger parties to come together and form a common front. He asserted that he had no belief in a referendum as far as French India was concerned for he said, "there could be no fair plebiscite". 226 Subbiah, Communist Party leader, addressing a big meeting just outside Pondicherry, issued an appeal to the people to forget all past differences and to give their full support to the merger movement.

Soon the decision of the French Government to give an unprecedented contribution of Rs. 1.5 crores to tide over the economic crisis in Pondicherry was announced by Ménard at a meeting of the **Conseil de Gouvernement** held on 7 March 1954. The meeting was not, however, attended by Goubert, Carnindiramoudéliar and Sivassoupiramaniapoullé.

There were soon certain quick developments in Pondicherry culminating in the French India Socialist Party and the Municipal Councils of the eight communes passing resolutions demanding immediate merger with the Indian Union without a referendum. Goubert explained that the reason for the sudden change in his stand was a late realisation that it was not worthy to be ruled over by the French. He adduced the desire to bring relief to the poor people who had been hit by the economic blockade enforced by the Indian Government as another reason for the change in his stance. 227

Apparently, in an attempt to forestall the move of the Socialist Party passing the merger resolution in the French India Assembly, Ménard postponed indefinitely the session which was scheduled to be held on 27 March. In another attempt to tide over the new crisis, he supported the move to form a new party to replace the Socialist Party.

The French India Administration had in the meanwhile charged some of the Socialist Party leaders with corruption.²²⁸ A few members of the French India Socialist Party were attacked.

On March 25, Goubert, French India *Député* and Councillor for Labour and Mouttoupoullé, Mayor of Pondicherry Municipality fled from Pondicherry to evade likely arrest. Soon after, the French India Socialist Party adopted a general plan of action to capture outlying communes one after the other and to run a parallel administration and then march to Pondicherry. The French India Communist Party planned to launch a campaign of direct action for the merger of Pondicherry town with India.

Situation on the border became tense. The Government of Madras, deployed units of the Special Armed Police to tighten the border. March 27 was the date fixed for launching the mass movement. Led by the Socialist Party and joined by other political parties, the movement began simultaneously in 16 villages in the four communes of Ozhukarai, Bahur, Nettappakkam and Mannadipattu. The movement took the form of a peaceful demonstration and the response was tremendous in all the communes and enclaves. Big processions were carried out in all the villages.

Tezenas du Montcel, Inspector General in the Colonial Office of the Overseas Department, who was deputed by France to study the situation here arrived in Pondicherry. Concerned over the developments on the borders of Pondicherry and its enclaves, the Government of India deputed R. K. Nehru, Foreign Secretary to hold consultations with the Government of Madras on the developments in Pondicherry and about the security arrangements made along the French India border. Soon after, the movement of armed French Police from Pondicherry to these communes was prohibited by the Government of India.

In another quick development, the French India Government by an order issued on 30 March dismissed E. Goubert and Mouttoucomarapparettiar from the **Conseil de Gouvernement**. The very next day, the Indian tricolour was hoisted over Nettappakkam police station by the Socialist Party leaders. Nettappakkam Commune with a population of 14,000 started having its own independent administration run by the people with the help of the Mayor and other nationalist leaders.

The attitude of the French officials now hardened; the entry of Indian nationals into Pondicherry was prohibited. The Government of India in turn, decided to cancel with effect from 19 April, the exemptions granted under the Indian Passport Rules, 1950, in respect of travel between India and the French establishments of Pondicherry and Karaikal. At the same time Tezenas du Montcel, Inspector General of French Colonies, while addressing a merchants' delegation at Pondicherry, stated, "France will not give up her possessions in India under any circumstances." 229

On 3 April, seven villages in Bahur Commune, forming an enclave in Indian Union territory declared themselves independent. The entire population of about ten thousand attended the meetings addressed by Socialist Party leaders after their triumphant entry. As the leaders moved up, the French Indian police in the villages surrendered their arms and pledged themselves to serve the liberated people as free men.

The French India Administration obviously became nervous over the momentum gained by the merger movement started by the Socialist Party. The Administration now tried to persuade the Socialist Party leaders who still remained in Pondicherry to adopt a new resolution, stating that they were forced to adopt these measures because of the attitude of the Government of India and that it did not imply any lack of friendship for the French Government. Henri Jacquier, member, **Assemblée de l'Union Française** had talks with the Socialist Party leaders then in Pondicherry. But all that he could say was that he was anxious to maintain the cordial relationship existing between India and France.

Having failed in their attempt to win over the local leadership, the French India Administration started lending support to the anti-merger propaganda launched by the newly formed Democratic Party* consisting mostly of retired officers and government servants. While the people were asked

* The party was started on 27 April 1954.

not to believe in Indian press reports, the liberation of Nettappakkam and Bahur Communes were sought to be discounted as rumours.* On 5 April, three more villages—Manamedu, Krishnavaram and Kaduvanur,—with a population of about 3000 in all in the Bahur Commune declared themselves free from French rule.

The liberation movement reached its climax on 6 April, when the people of a whole commune consisting of 22 villages spontaneously declared themselves free from French rule. Thus Mannadipattu (formerly Tirubhuvanai) Commune with a population of 23,000 gained the distinction of being the first commune to declare its freedom without a single leader stepping into any of the villages.

The movement took a new turn the next day when the Indian tri-colour was hoisted for the first time in Pondicherry and demonstrations were staged right from dawn demanding the merger of these areas with India. Processions taken out from different parts of the town converged on Odiensalai maidan. Nearly 350 volunteers were arrested according to unofficial reports. Demonstrations were held in Dupleix Street†, the main shopping centre of the city. Shops pulled down their shutters, but reopened after some time. On the second day, volunteers of the French India Youth Congress, the Communist Party and the Dravida Kazhagam staged demonstrations. The French India Administration deployed the military personnel, purported to have come to Pondicherry from Saigon on holiday, to assist the local police force for patrolling the streets.

Subbiah pursued his efforts to bring some more parties into the United Front in a bid to intensify the movement. He then issued an appeal to French India refugees, totalling about 10,000 who had crossed over to the Indian territory to come and join the movement. In the meanwhile, a Temporary United Government was formed in Tirubhuvanai with representatives from the Merger Congress, the Socialist and the Communist Parties‡ to carry on the administration of the commune.

* The Bahur Commune consists of a batch of four enclaves.

† Now Jawaharlal Nehru Street.

‡ Manicka Gounder (Merger Congress), Azhagiya Manavala Reddiar (Socialist Party), S. Narayanassamy (Communist Party).

The Government of India in a note to the French Government firmly rejected the French proposal that the future of these establishments should be decided by a referendum under international control. The Indian Government also lodged strong protests with the French Government against the violation of Indian territory by French Indian Police.

On 14 April the Students' Congress launched a campaign under the leadership of Dorai Mounissamy. The volunteers were beaten up by the police and hooligans.²³⁰ The authorities indulged in indiscriminate use of force, and the houses of nationalist leaders were attacked. Many of the pro-merger leaders were arrested and sentenced for defying prohibitory orders.

The developments in Pondicherry increasingly attracted world wide attention. The 'New York Times' criticised the Communist Party for liberating some of the French pockets. The paper averred: "France can hold that the loss of the virtually worthless colonies is far better than the loss of friendly relations with India and can better afford a generous gesture than giving an additional weapon to her communist foes". Emphasising its contention, the paper stated that Nehru was right in refusing to recognise the legality of the Communist liberation of parts of Pondicherry territory and added that "if the Indian Government and France can come to a prompt and just agreement within the law on the return of these territories the ground can be cut from under the Communists' feet".²³¹

A Condominium Plan was put forward by Henri Jacquier, **Membre de l'Assemblée de l'Union Française** and Paquirissampoullé, French Indian Senator with the approval of the French Government. Explaining his proposal, Jacquier said: "I believe that the destiny of the settlements is not to be anonymous cantons isolated in an immense country. Their destiny is to be a commercial link, a free area between India and France." He almost echoed the thinking of Baron. The Condominium Plan was categorically rejected by the nationalist leaders, including Congressmen and Communists, as merely intended to delay the transfer of power.

The leaders of the Socialist Party, in a telegram addressed to Prime Minister Nehru, declared that the liberated communes would never again pass under French authority, however partial or indirect. Subbiah called upon the Government of India to accept the merger of these areas with the Indian

Union and take over their administration, and added that any constitutional difficulty felt by the Government could not, however, stand in the way of at least temporary arrangements for the supply of essential articles to the population of these areas. 232

An All-Party Conference was convened on 26 April by the French India National Congress. The Youth Congress, the Communist Party, the Dravida Kazhagam and the Dravida Munnetra Kazhagam which attended the conference condemned the ruthless repression let loose by the administration against the non-violent pro-mergerites, but made it clear that the struggle was not directed against the French people or their linguistic and cultural influences, but only against French rule in our soil.

A joint front composed of French India Communist Party and other Leftist organisations and the Central Merger Congress was formed on 29 April to intensify the struggle. The leaders expressed the view that no party differences should come in the way of carrying on the fight and the movement should be intensified with redoubled vigour adhering strictly to the tenets of the Gandhian principle of non-violence.

On 1 May, an unruly crowd of French Indians numbering about two hundred from the village of Settipattu, obstructed the passage of Indian police on the road running across the Indian territory. The Malabar Special Police opened fire, injuring a few of the French Indians. Nevertheless, on 6 May, it was announced that the Governments of India and France would hold talks in Paris starting from 14 May, to discuss the future of these establishments. India was represented at the talks by R.K. Nehru, and the French delegation was headed by Guy de la Tournelle, Director of Political Affairs in the Foreign Ministry. The French side referred to the exchange of notes and expressed the desire to reach an amicable settlement. The Government of India announced the relaxation of the permit system* and the resumption of petrol supply banned in March to create a better atmosphere for the Paris negotiations.

* The Government of India introduced a permit system with effect from 19 April 1954 regulating the movement of people between the French establishments and India. The Consul General of India at Pondicherry alone was authorised to issue single journey visas on the identity certificates issued by the French authorities to the residents of French India.

In the meanwhile the Youth Congress continued to take out processions defying ban orders and to voice their demand for immediate merger. A 19-member Council of Administration known as the French India Liberation Council was set up on 17 May at Nettappakkam to carry on the administration of the liberated communes. The Council was also vested with powers to maintain law and order in the liberated areas. A three-member Executive was formed with Goubert as leader to implement the decisions of the Council. Following these developments, the French India Socialist Party came to be called as French India Liberation Congress.

These and other developments brought to the fore the rivalry among the political parties. Goubert accused the Communist Party of resorting to pinpricks towards those engaged in the liberation struggle. Subbiah charged the Socialist Party workers with indulging in violent acts in Tirubhuvanai, a commune liberated by the Communists. In this connection V. Subbiah soon presented a memorandum to K. Kamaraj, Chief Minister of Madras. 233

Reports of the Paris talks were disappointing. Except each side re-stating its previous position little progress was made at the talks. The French continued to insist on holding a referendum whilst the Indian Government felt there was no need for it and that the administration of the enclaves should be handed over immediately while constitutional details for *de jure* transfer could be worked out later.

The administration of Pondicherry virtually passed into the hands of one man. Meetings of the *Conseil de Gouvernement* were suspended. The Representative Assembly was prorogued. Ménard, Commissioner for French India, was now the undisputed ruler.

The freedom struggle in French India received wide publicity in France through the French Communist Party organ *L'Humanité*. The paper sent its fraternal greetings to the freedom fighters of French India. Pierre Juvain, General Secretary of the Party, assured his party's support for the national aspirations of French Indians struggling against French imperialism. In an article, the paper clearly stated that the continuance of French rule over parts of Indian soil was detrimental to the authority, liberty and peace of India. 234

The month of June brought news of the breakdown of Franco-Indian talks which had been in progress for nearly three weeks. The communique issued at the end of the talks mentioned that several possibilities were considered by both delegations with a view to reaching a settlement. According to R.K. Nehru, the French had finally dropped their demand for a referendum but maintained their insistence on popular consultation. He pointed out that India would, however, be willing to consider this, only after effective control of the administration had passed into her hands. The French Foreign Minister in another communique gave his version of the talks. It said that during the talks France had given India the choice of two solutions-(i) "Immediate referendum under the eventual supervision of the United Nations". (ii) "Immediate establishment of a provisional regime largely associating the Indian administration with the management of the establishments; preparation of a treaty looking forward to the merger of the establishments with India with respect for the French cultural and material interests; ratification of this Treaty after consultation with the population". The communique added: "Rejecting the first solution, the Indian delegation turned down the idea of a co-management and insisted on having immediately all authority over the essential services, notably those of justice, police and treasury". The communique further made it clear that the French delegation will not agree to the cession of services touching so closely on the exercise of sovereignty.²³⁵ The suggestion for a joint administration for a few months until constitutional difficulties for a *de jure* transfer could be overcome, had actually emanated from France. It was, therefore, expected that France would appreciate the realities of the situation and reconcile herself to the inevitability of quitting the establishments. And the reality of the situation was that almost 40% of the population and nearly half of the total area of the establishments were no longer under French control.

News of the breakdown of the Paris talks was received with great disappointment in Pondicherry. This, however, caused no surprise among the nationalist circles. They maintained that the French had started the talks only with a view to gaining time so that the liberation movement which was in full swing, might cool down. Meanwhile reports of the landing of French troops on board the 'Vietnam' at Pondicherry created a stir in the capital. The Government of India immediately lodged a strong protest with the Government of France. The French Foreign Ministry denied rumours attributing motives to the landing of troops and explained that only 50 gendarmes had arrived to strengthen the police force required for the maintenance of law and order.

The various nationalist groups continued their struggle by taking out pro-merger processions. Arul Raj, Leader of the French India Youth Congress, condemned the inhuman brutalities perpetrated on the volunteers by the French Police and said that the French had thrown all decency and civilised behaviour to the winds. "These", he said, "are the last flickers of a dying colonial regime".²³⁶ On 24 June, it was reported that 'St. Nasaire' a cargo ship which arrived from Saigon had unloaded a large consignment of ammunition. There were also reports of slit trenches being dug on the borders to prevent volunteers from Tamil Nadu and the surrounding enclaves from entering Pondicherry town to join the satyagraha movement.

On 29 June 1954 the National Assembly of France lifted the parliamentary immunity enjoyed by J.E. Goubert and initiated proceedings against him for treasonable activities. Simultaneously more brutal and repressive methods were resorted to put down the merger movement. The intimidatory activities of the goondas were looked upon with tolerance, suggesting a disinclination on the part of the French Indian Administration to bring them to book. Essential commodities were in short supply and the plight of the people of Pondicherry grew worse day by day. Due to dearth of Indian currency, it became increasingly difficult to exchange French bank notes. The demand for Indian currency outstripped its supply and caused considerable difficulty to the local population. Kerosene became scarce. Supply of electricity was cut off. Bus traffic between Pondicherry and Madras had to be suspended following the stoppage of buses at Kattupalayam, Kuttu-road and Kandamangalam by French India refugee volunteers.

With a view to giving a stable and effective administration to the liberated enclaves of Pondicherry, the French India Liberation Council appointed two retired officials of the Government of Madras to administrative posts at Nettappakkam. H.S. Paul, a retired District Collector, was appointed Administrator in the Liberation Government and Raja Mohamed, a retired D.S.P., as the Chief of Police. Siva, a former Administrator of Yanam, was appointed head of the judiciary of the French India Liberation Government of Nettappakkam. The liberation movement in Mahe had reached such a critical state that the establishment declared itself free on 16 July 1954. There was great jubilation throughout Pondicherry.

Meanwhile Du Tamby's Democratic Party sought to rally under its banner all pro-French groups including that of Gaudart, former member of the Assembly of French Union. But the trend of events were so fast moving that within a fortnight the party had to change its stand. On 18 July, Du Tamby admitted that peoples' economic life had become so intolerable and the French Administration had failed to protect the people's interests, that French India's merger with the Indian Union had become an immediate necessity.

About the same time, in Bahur Commune, the Mayor and all the Municipal Councillors except two, left the enclave to register their protest against police repression and sought refuge at Cuddalore from where they resolved to lead the Bahur refugees numbering a few thousands to liberate the area as speedily as possible. The Pondicherry Bar Council, with S. Peroumal in the chair, unanimously adopted a resolution demanding immediate merger. So also did the Merchants' Association of Pondicherry.

On 5 August, it was announced that formal negotiations were resumed between France and India on the future of the remaining establishments in India.²³⁷ A complete hartal was observed in Pondicherry on 9 August, in response to the call given by the Communist Party and the Youth Congress.

On 11 August, Ménard, the Commissioner left Pondicherry for France. Escargueil, the Secretary General, took over charge as Commissioner. Informed circles attached much significance to the makeshift arrangement and felt that this was a prelude to an imminent transfer of power. Towards the end of September, there were reports from some unofficial but reliable sources, that a satisfactory agreement had been reached between the two Governments over the question of French establishments. The sources indicated that the demands of the Communist Party and Du Tamby's Democratic Party for the transfer of power only to the Indian Government had been conceded.²³⁸

On 12 October, a joint Franco-Indian declaration announced a settlement regarding French territories in India which was to be submitted to the elected representatives of the people for approval. Credit is due as much to the liberal initiative of Mendès-France, Prime Minister of France, as to the patient parleying of Prime Minister Nehru in arriving at a peaceful and honourable solution to the problem.

On 18 October 1954, 170 out of 178 municipal councillors and members of the Representative Assembly of the four French Indian establishments of Pondicherry, Karaikal, Mahe and Yanam met at Kilur and gave their verdict in favour of merger with the Indian Union. Balasoupramanien, President of the Representative Assembly, conducted the proceedings. News of the merger verdict tore its way to hundreds of villages. Great jubilation followed the receipt of the news; the members were garlanded and taken in a procession with band and pipe music. 239

The Agreement for the *de facto* transfer of the French establishments to the Indian Union was signed in New Delhi on 21 October 1954 and came into effect on 1 November 1954 with the signing of the instrument of transfer of power at the Government House, Pondicherry by Pierre Landy, Special Envoy of France on behalf of Paris and Kewal Singh, on behalf of the Indian Government. A salvo of guns was fired to mark the occasion and the Indian tricolour went up over the Government House.

The four establishments were constituted into a Part C State of the Indian Union, with Kewal Singh, Consul General of India taking over as the first Indian Chief Commissioner. About 35 political leaders, who were until now forced to remain outside Pondicherry on account of their involvement in the merger movement made a triumphant re-entry into the capital and participated in the celebrations. Among the leaders who returned were E. Goubert, Mouttoucomarapparettiari, Mouttoupoullé of the Socialist Party and V. Subbiah, the Communist leader. All along the route, from the time of their entry, they were received with tumultuous ovation by large crowds. The ceremony marked the end of the 280 year-old French rule.

Karaikal Region :

The formation of the Karaikal National Congress on 13 June 1947, and the Students Congress on 31 January 1947 symbolised the first concrete expression of popular desire in Karaikal for freedom from French rule. Though R. Supparayan and Sivanandam had sought the permission of the French Administration for starting the Students' Congress as early as 21 September 1946, permission came only late in January 1947.

In a resolution passed on 13 March 1947, the Karaikal National Congress made known its resolve to fight for the merger of the establishment with the Indian Union. The Working Committee of the Congress also referred to the Free City proposal put forward by France and rejected the same by unanimous decision. The Committee viewed the terms of the proposal as contrary to the will of the people who wished to join their motherland and decided to launch a non-violent campaign to express its opposition to the new proposal and raise a fund of Rs. 50,000 for conducting the campaign. It was also decided at the same meeting to organise a volunteer corps which was to be guided in its action by the principles of truth, love and fearlessness. 240

At a public meeting held on 21 December 1947 under the presidency of Ahamed Naina Maricar, a resolution was moved by Kali Charan Ghose, the labour leader, urging French Indians to commence their struggle for liberation.²⁴¹ Early in April 1948, Léon Saint-Jean, Secretary of the Congress group in the French India Representative Assembly declared that there was no other alternative for the French establishments than to merge with the Indian Union.

Following the June 1948 Agreement, it was decided to hold the Municipal elections as a prelude to holding the referendum. Supporters of the French India Socialist Party who were opposed to merger, resorted to violent tactics to cow down pro-mergerites and their supporters. The Karaikal National Congress was, therefore, forced to boycott the October 1948 Municipal elections.

Venkata Sabapathi Pillai, President of the Karaikal National Congress reported of violent attacks on polling booths in Niravi Commune and other areas. Only in Tirunallar area, where Filatriau, Secretary to the Administrator, was the President of the booth, the election was carried out constitutionally. There alone the Congress candidates won all the seats. A.M. Saminatha Chettiar, who was here on behalf of the All India Congress Committee as an observer, stated that in most of the polling booths in Karaikal Commune, Congress assessors were forcibly thrown out by members of the opposition party. When the results were finally announced, it was found that out of the total 74 seats, 64 had been won by the Socialist Party and only 10 by the Congress. 242

The Municipal Councils of all the four establishments which met in March 1949 at Pondicherry fixed 11 December 1949 for holding the referendum. The meeting also decided to send a delegation to Paris and Delhi to ascertain the attitudes of the Governments towards the future of these areas.

In 1949, Léon Saint-Jean formed a new party called the Merger Congress for the sole purpose of opposing the French Government, as his political views on the future of French India had started crystallizing from the middle of 1948.* In April 1949, he moved for consideration in the Representative Assembly, a resolution for the immediate merger of the French establishments with the Indian Union.²⁴³ The manner in which the municipal elections were manipulated was enough to convince many of the futility of such exercises. Léon Saint-Jean, therefore, decided to intensify the liberation movement in Karaikal. As founder of the Merger Congress, he rallied round the various political parties working for the liberation of the establishments and openly asked the Government to revolt against the French.²⁴⁴

The movement gathered momentum early in 1954. The Karaikal United Merger Committee, with Joseph Xavéry, its President in the chair, adopted a resolution moved by Nagarajan welcoming the decision of the French Indian Councillors and Mayors of various communes to merge the establishments with the Indian Union without a referendum.²⁴⁵ On 22 March 1954, leaders representing the Congress, the Dravida Kazhagam and the Communist Parties formed a United Merger Front. R.M.A.S. Venkatachalapathy Pillai was elected President, and Léon Saint-Jean, Secretary of the Front. Representatives of the Dravida Kazhagam and the Communist Party were elected Vice-President^t and Assistant Secretary respectively. The Front requested the people of Karaikal to keep the Indian flag hoisted on their houses from 26 March onwards until merger was achieved with the Indian Union.²⁴⁶

The same day, volunteers of the Karaikal National Youth Congress launched a satyagraha movement under the leadership of Ramasrinivasan, its President. The procession which was taken out by the Youth Congress through Tirunallar Road and the Church Road was lathi-charged by the police. The French India Liberation League of Nagappattinam extended its support to

* He was elected unopposed to the Representative Assembly from Tirunallar constituency on 15 December 1946. But from the middle of 1948, in all meetings he started demanding the immediate merger of the French establishments with the Indian Union.

the freedom struggle in Karaikal and condemned the repressive measures adopted by the authorities to put down the spontaneous expression of the people's desire to merge with the Indian Union. ²⁴⁷ Following the formation in April 1954 of a new anti-merger party—the new favourite of the administration—the police and the gangsters started to act in concert and to terrorise those who expressed sympathy for the liberation movement. Their intimidatory activities drove hundreds of victims to the Indian Union territory for safety.

On 7 April 1954, S. M. Sheik Madar Sahib Maricar, a prominent Nationalist Muslim was unanimously elected President of the Karaikal National Congress. Soon after his election, Maricar announced its programme to launch a non-violent movement to liberate Karaikal. ²⁴⁸ Batches of volunteers who took part in the satyagraha were arrested by the local police. Prominent leaders of the Karaikal Congress including Sheik Madar Sahib Maricar, President, Nagarajan, Action Committee member of the Congress and the 60-year-old Darbaranya Sundiram Pillai defied the ban on processions and meetings by taking out a procession from the premises of the Congress Office. The police forcibly snatched the Congress flags from the processionists. Those who refused to surrender the flags were severely beaten up. They were later taken into custody by the police. Two days later Maricar and Nagarajan were charged before the Karaikal Tribunal for rebellion and for having defied the ban order. They were sentenced to undergo three months' imprisonment and to pay a fine of 100 francs. ²⁴⁹

In the meanwhile, the Karaikal United Merger Front started forming committees in all the communes of Karaikal region. The first committee was formed in Niravi Commune with V.M. Abdul Razak Rowther as its President.

It was about this time, the Condominium proposal came to be offered as a possible solution to decide the future of the establishments. The Working Committee of the Karaikal United Merger Front unanimously denounced the proposal in a resolution. It said: "The front strongly opposes the move of M. Henri Jacquier and *Sénateur* S. Paquirissamypoullé to confer Condominium status on French India. This is an insult to our national aspirations.... Nationalists cannot tolerate the existence of any kind of foreign foothold on any part of Indian soil." ²⁵⁰ The Condominium plan was also opposed by the Pro-French Progressive Party. Robert Saint-Jean, Secretary of the party criticised the proposal and said that it satisfied neither the pro-French nor pro-merger parties. ²⁵¹

Organisations like the Netaji Youth League, the Jawahar Youth League, the Karaikal Students' Congress, the Karaikal Pagutharivu Manram and others came out in support of the demands of the United Front for speedy transfer.

On the night of 11 May 1954, those desiring the continuance of French establishments under the French Union formed a committee known as **Comité Francophile** and elected de la Flore, advocate and Municipal Councillor, as President. Explaining the object of the organisation, he said that it stood for maintaining French sovereignty in the French Indian settlements because ".....our education and culture since some centuries are French. We are Frenchmen by birth, although we were born in India". 252

By this time, Indo-French talks were resumed in Paris between representatives of France and the Government of India. Leaders of the Karaikal United Merger Committee sent messages to the respective heads of Governments reiterating their demand for the immediate transfer of the establishments. At the same time the pro-merger parties in Karaikal continued their agitation. Almost every other day processions were taken out by volunteers of the various pro-merger groups; volunteers were arrested by the French police for defying ban orders. In an overt attempt to stop the agitation, Ramasrinivasan, Youth Congress President and M. Subramaniam, Secretary, Karaikal Communist Party were taken into custody. Léon Saint-Jean charged the police for acting with marked partiality towards a handful of anti-mergerites and against the mass of pro-mergerites. At the same time nationalist leaders of Karaikal criticised French attempts at the Paris talks to revive the plebiscite proposal. 253

The Indo-French talks held at Paris since the middle of May broke down on 4 June 1954. A communique issued after the last session said: "The difficulties of reconciling the two view points has led the two delegations to discontinue their talks." 254 Paquirissamypoullé, Senator, on his return from Paris, told a press conference at Karaikal that France had decided to transfer her authority over her 300-year-old establishments in India, but was only considering the constitutional methods to be adopted, excluding a referendum, to achieve this end. He further added that in solving this problem the French Government was seeking the co-operation of French India leaders who could help to cultivate friendship between France and India.

Shortly after, K. Balasoupramanien, President of the French India Representative Assembly, who signed the merger resolution was asked to send a via-media proposal, satisfying both the constitutional needs of France and those of the people whose representatives had signed the merger resolution. 255

Leaders of the Karaikal United Merger Front, however, continued to demand the immediate transfer of the establishments to the Indian Union. Processions were taken out condemning the landing of French troops at Pondicherry. The French Police confiscated even licensed fire-arms in the possession of nationalists.

The economic crisis in the region worsened; prices of daily necessities of life increased sharply. Bus traffic into Karaikal was completely paralysed as a result of picketing by refugees in Indian territory. Refugees from Karaikal continued to pour into the border town of Nagappattinam. According to their reports they were forced to leave their homes because of restrictions imposed on their movements by the Administration there.

The nationalists renewed their satyagraha on 22 July 1954 by defying the government ban on processions. Volunteers of the Karaikal United Merger Front representing the Dravida Kazhagam, the Liberation Congress and the United Merger Front led the struggle. Many of the volunteers courted arrest. In the meantime, the police force was strengthened by the landing of about five European military officers and 20 armed policemen from Pondicherry. They came by a steam-launch from Pondicherry on 27 July.

In the meanwhile, the Administration took stern measures to curb the movements of the nationalist leaders in an attempt to stall the growing momentum of the popular movement. S.K. Subbarayan, President of the Dravida Kazhagam and member of Karaikal United Merger Front was convicted and sentenced to one month's imprisonment. Students of Modern College,* Karaikal in a symbolic gesture went on a fast to effect a change of heart among all government servants, lawyers and merchants in favour of merger. 256 Léon Saint-Jean, Secretary-General of the United Merger Front joined the students in the fast. In deference to the request of various organisations the fast was given up on 30 July 1954. The satyagraha campaign continued all over the region till the liberation movement was suspended following the Indo-French accord (October 12) over the future of the French establishments in India.

* Now Arignar Anna College.

The agreement was warmly welcomed by all political groups in Karaikal. Members of the Representative Assembly and Municipal Councillors of the French India settlements met at Kilur (Kizhur) and voted for merger with the Indian Union. 257 The French flag flying over the Government House at Karaikal was lowered on the evening of 31 October with due military honours before a large gathering of officials and non-officials. Boucheney, Administrator of Karaikal, handed over charge to the French Consul and the latter transferred the power on 1 November 1954 to A.V. Loganathan, the first Administrator of liberated Karaikal. The residents of Karaikal celebrated the historic occasion by decorating their houses with flags and festoons. 258

Mahe Region :

Following the 8 June 1948 Indo-French Agreement, Municipal elections were scheduled to be held on 24 October 1948. The Mahajana Sabha which espoused the cause of merger decided to contest all the 12 seats in the Mahe Municipal Council. 259 Simultaneously a campaign for the merger of the French Indian territories with the Indian Union was launched and a mass rally was held on 18 October at Pallur, near Mahe, under the direction of the Malabar Socialist Party. I. K. Kumaran, President of the Mahajana Sabha, accused the authorities of campaigning in favour of candidates who supported the Administration and charged the Government as showing discrimination against parties favouring merger with the Indian Union.

About this time a pro-French party came to be formed in the area, through the combined efforts of some members of the French India Representative Assembly, the Mayor and the authorities. 260

There was widespread concern over the improper distribution of voters' identity cards to the detriment of the Mahajana Sabha and its supporters and sympathisers. On 20 October large-scale disturbances took place, obviously with the connivance of the officials to gerrymander the elections. Several workers of the pro-merger front were arrested and some were taken into custody for holding meetings. The next day about 200 supporters of the Mahajana Sabha picketed the Mayor's Office demanding the issue of voters identity cards. C.E. Bharathan who was then in the forefront of the freedom movement pleaded for the restoration of civil liberties and called for the release of all those convicted since 8 June 1948. On the evening of 21 October an enraged crowd paraded the streets of Mahe, raided government offices and

buildings and pulled out and burnt records and furniture. The police force surrendered their arms and ammunition to the Mahajana Sabha and the Indian Socialist Party volunteers. The government machinery was totally paralysed and the volunteers took over the police stations, the treasury and the revenue offices.

These developments followed the incidents at the Mahe Municipal Office where I.K. Kumaran and N. Narayanan Nair, a Socialist Party worker were roughly handled by the police. The crowd surged to the Municipal Office, clashed with the police and burnt the records. Thereupon, the Administrator of Mahe rushed to the scene with a posse of gendarmes who, however, withdrew after finding the situation unmanageable. The armed guards at the Administrator's Office then surrendered. The crowd next marched into the adjacent French villages like Pallur and Pandakkal where too the police surrendered. The arms and ammunition surrendered by the police were taken possession of by the volunteers and deposited in the Mahajana Sabha office where some citizens had earlier voluntarily deposited their arms. 261

On the morning of 23 October 1948, I.K. Kumaran, President of the Mahajana Sabha, hoisted the Indian Union flag over the Administrator's Office, in the presence of thousands of people. The Administrator, Mayor and other prominent citizens were also present. Speaking on the occasion, I.K. Kumaran referred to the incidents which occurred the previous day and declared that it signified the spontaneous uprising of the people against the French authorities.*

Messages were sent to the Home Minister of the Government of India stating that the French Administration had collapsed and asking the Government of India to take over the administration. District officials from Malabar visited Mahe for the avowed purpose of determining the involvement of Indian citizens in the happenings of 21 October. Soon after, the Sub-divisional Magistrate, Tellicherry ordered the police to patrol the villages bordering the French territory.

The French Foreign Office in a communique issued on 23 October stated that the French Government had learned with painful surprise the incidents at Mahe on the eve of the Municipal elections and declared that

* Perrier, the Administrator described the incident as a coup d'état.

these troubles were caused by exterior elements. It further added that information about their actions had been brought to the notice of the Indian Government on several occasions. The communique made it clear that the Government of France will not recognise the decisions which have been imposed on the population of Mahe, and announced that the proposed elections stood postponed until electoral consultation could take place in dignity and order.²⁶²

Daniel Levi, Ambassador of France in India blamed outside elements from the Indian territory for the developments in Mahe. The Government of India did not, however, accept Levi's contention that a large number of Indian nationals had penetrated into the French establishment to create trouble. Nevertheless, the Government of India asked the Madras Government to give them a first-hand appraisal of the situation in Mahe.

The People's Defence Council set up under the joint auspices of the Mahajana Sabha and the Socialist Party began functioning with effect from 25 October 1948. At a police rally held on the same day Michelotte Bharathan, member of the Council and captain of the volunteers took the salute. On the occasion, policemen pledged themselves to function under the Council's direction. Even government offices and educational institutions in the area started seeking directions from the Council.²⁶³

Surprisingly on 26 October, a cruiser of the French Navy arrived off Mahe. Its appearance caused a stir among the people. A tense atmosphere prevailed since the landing of the troops and the local inhabitants prepared to vacate their homes on their own accord. All heads of departmental wings including the Administrator moved out of Mahe. The cash in the Treasury and in the rationing office was also removed. The same day a fact finding mission landed only to find the Government House lying abandoned. Following the receipt of a message from the Administrator, talks were held between representatives of the Defence Council and the Captain of the ship the next day. While the Defence Council demanded a categorical declaration regarding the future of the establishments from the Minister for Colonies, the Captain insisted on removing the flag and called for the return of all weapons. Talks ended at 4.30 p.m. The Defence Council advised the people to leave the place. But the cash removed from Mahe was returned intact. The arms and ammunition which were carried away from Mahe to the Indian territory could not be returned as they had to be surrendered to the Indian police. Shortly after, the Indian flag was lowered by the Captain of the ship and the French flag was hoisted again. Armed sailors were put on sentry duty.²⁶⁴

French naval troops, accompanied by French Indian armed and ordinary police paraded the streets of Mahe. Meanwhile the exodus of people from Mahe to the neighbouring Indian territory continued. Very soon news arrived that Governor Baron was *en route* to Mahe in 'Duguay-Trouin', another cruiser with more reinforcements. The exodus continued. 265 The developments of the week drove nearly 5000 people to the neighbouring Indian territory.

Governor Baron landed alongwith 300 sailors and straightaway sent out an appeal to the people to return to their homes. This appeal did not evoke much response. The cruisers which arrived on 26 October and 29 October left suddenly on 31 October, leaving five officers and 32 sepoys with necessary arms and ammunition.*

On 3 November 1948 the Defence Council appealed to the people to return to their homes. Normal conditions slowly returned around 10 November by which time most of the evacuees returned to Mahe. In the meanwhile, some of the Mahajana Sabha leaders were arrested by the French Indian armed police. Many of the leaders of the Mahe Mahajana Sabha continued to live in Indian territory. C.E. Bharathan left for Delhi and reported the developments in Mahe to Jawaharlal Nehru, India's Prime Minister. The Government of India suggested that the Mahajana Sabha be allowed to participate in the Municipal elections which were scheduled to be held in February 1949. The suggestion did not find favour with the French Administration. As a result, a completely pro-French faction was returned to power in the Municipal elections.

In May 1950 the Administration sentenced nearly 40 people *in absentia* to 20 years' imprisonment and a fine of 1000 francs each, and ten others to five years' imprisonment, for participation in the October Revolt. The citizenship (French) of all those accused was suspended and their properties confiscated by the Government. 266

* One explanation given for the sudden withdrawal of the cruisers and the departure of Governor Baron was said to be the realisation that the flaunting of military might would only increase the rate of exodus of the population.

The team of neutral observers which visited the establishment in April 1951 to study the prevailing conditions noted serious difficulties preventing free popular consultation. Between April 1951 and March 1954 no significant development took place in the area. Nevertheless, nationalist leaders in Mahe continued to be in touch with the Indian leaders and kept reiterating their demand for a speedy end of foreign domination.

With the intensification of the freedom struggle in Pondicherry early in 1954, the leadership in Mahe also took necessary steps to strengthen the movement there. In an appeal addressed to the people of Mahe, the Mahajana Sabha called upon all the patriotic citizens of Mahe to get ready for the final struggle to achieve freedom. It also urged the people of Malabar in general and those residing in areas surrounding Mahe to extend their full support to the struggle. The Sabha welcomed the change in the attitude and policy of the French India Socialist Party and congratulated it on the movement it had started. The French India Administration soon launched a vigorous drive against pro-merger sympathisers. The Indian Government posted police pickets around Mahe from 24 March to prevent the passage of French armed policemen and officials through Indian territory.

The Working Committee of the Mahajana Sabha was enlarged by co-opting Mangalat Raghavan of the Praja Socialist Party and three others and it was decided that the struggle would be carried on under one flag and one leadership. Anandan Nair, an advocate from Mahe was elected Joint Secretary of the Mahajana Sabha.

Shortly after, P.K. Usman and N.C. Kannan initiated the struggle sponsored by the Mahajana Sabha. A procession taken out by the workers of the Mahajana Sabha was attacked by gangsters and the leaders were assaulted by the police. Several restrictions were imposed by the Administration in a bid to checkmate the growing aspirations of the people. Shopkeepers and other businessmen in Mahe and the adjoining areas were ordered to close down their premises before 9 p.m. every day. Volunteers taking out processions were arrested and severely manhandled by the police.

It was about this time that the Condominium proposal was put forward as a feasible measure to decide the future of the French Indian establishments. But the proposal met with a cold reception. I.K. Kumaran, President of the

Mahajana Sabha in a press statement, denounced the proposal as part of the traditional French imperialist policy. He said the proposal was basically a kind of partnership in domination and declared that no patriot would be misled into the trap. 267

On 27 April, a batch of Indian Communists entered the enclave of Cherukallai* near Mahe. French India sepoys opened fire wounding many. P.P. Anandan who received bullet wounds died subsequently in the Tellicherry hospital. Dead bodies of two other volunteers were later recovered from the sepoy camp which was found deserted.

The following day, Mahajana Sabha volunteers led by the members of the Action Committee marched into Cherukallai without meeting any resistance from the police. I.K. Kumaran hoisted the Indian flag over the police station. With the occupation of Cherukallai by the Mahajana Sabha, French rule came to an end in the enclave. 268

On 1 May 1954 seven out of the ten councillors of Mahe Municipality signed a pro-merger resolution and forwarded an appeal through cable to the French Government in Paris to allow the integration of the establishment with India. But in the days that followed Naluthara came to witness a reign of terror.

The signatories of the resolution and many others took refuge in Indian territory. On 8 May, the French Indian Government gave up Pallur and Pandakkal, two villages in the Naluthara enclave, by pulling out all the 30 policemen stationed there. Simultaneously the liberation forces led by V.N. Purushothaman, the French India Socialist Party leader and Member of the Representative Assembly declared the enclave free and hoisted the Indian flag over buildings. The Government of Madras gave escort through Indian territory. The volunteers followed by a concourse of people paraded the streets shouting nationalist slogans.

A panchayat headed by V.N. Purushothaman, Deputy Mayor of Mahe was formed to carry on the day-to-day administration of the liberated areas. The liberation of these two villages left only the small port town of Mahe under the control of the French where the mass agitation reached its zenith. 269 Shortly after, a seven-man Council comprising councillors from Naluthara assumed charge of the administration of Naluthara and Cherukallai.

* The enclave of Cherukallai lies between Mahe and the enclave of Naluthara.

On 15 June, 1954 the Action Committee of the Mahajana Sabha met at Naluthara when I.K. Kumaran reviewed the situation following the breakdown of talks in Paris on the future of the French establishments in India. The Action Committee resolved to resume and intensify the struggle for the liberation of French Mahe proper through all means, including the imposition of an economic blockade. The Action Committee of the Mahajana Sabha was also enlarged to include P.N. Kunhikannan, K.K. Govindan Nambiar and Paloli Kunhiraman to represent the French India Liberation Congress. The Committee at the same time appealed to the Indian Government to enforce strictly the travel and customs restrictions which were reintroduced in respect of Karaikal and Pondicherry. About twenty-two citizens of Naluthara who were employees of the French India Government were declared undesirable and expelled by the Council from the liberated area.

In the meanwhile reports arrived of trenches being dug by the Mahe police at Azhiyur and Parakkadavu. On 30 June, some representatives of the people, including the Mayor, Municipal Councillors and local members of the French India Representative Assembly unanimously passed a resolution demanding merger. Following this a tense situation developed in Mahe. 270 A large number of people came to be harassed for expressing sentiments favouring merger. More people crossed over to the Indian territory for fear of repressive measures. For its part, the Administration expelled T. Bhaskaran and T. Balan of the Communist Party from Mahe. The Mayor, N. Sahadevan crossed into Indian territory after presiding over the pro-merger meeting on June 30. With the tightening of the people's blockade round Mahe, scarcity conditions set in. Several items of daily use were in short supply. On 6 July volunteers of the Mahajana Sabha entered Mahe from several points and hoisted the Indian flag over house tops. 271

In a personal appeal addressed to the Administrator, I.K. Kumaran warned him of the grave situation that had arisen in Mahe and asked him to withdraw from Mahe. The tactics of the Administration to beat down the popular upsurge was criticised by C.E. Bharathan. He warned that even if negotiations between the two Governments were resumed, the struggle for liberation would go forward without relaxation. Under these circumstances, the Action Committee of the Mahajana Sabha resolved to march into Mahe on Bastille Day (July 14) and to wrest power from the French.

On 11 July, a conference was arranged between the Administrator and the leaders of the Mahajana Sabha. Proposals for an interim settlement providing for the immediate transfer of power to the people was formulated and forwarded to the Government of Pondicherry. Following the receipt of a reply, the Administrator called the leaders of Mahajana Sabha on 15 July for further discussions. On that day, I.K. Kumaran, C.E. Bharathan, Mangalat Raghavan, P.K. Ramu and P. Kumaran—all members of the Action Committee of the Mahajana Sabha met Deschamps, the Administrator in his official residence. Deschamps told them that he had been instructed to hand over the Administration to an Administrative Council consisting of representatives of the Council and the people and to entrust the responsibility of constituting the Council to I.K. Kumaran. The night before this, hundreds of volunteers marched into Mahe joined by the citizens of Mahe and staged a token demonstration before the Administrator's residence. The French had to submit finally to popular opinion which had unmistakably demonstrated its opposition to the continuation of French rule and its desire to merge with the Indian Union.

The decision of the French Government to transfer power to the people of Mahe was implemented on 16 July 1954 at a farewell function got up in honour of Deschamps, Administrator, by the Mahajana Sabha at Government House. I.K. Kumaran, President of the Mahajana Sabha and a member of the Joint Action Committee of the Liberation Movement, took over powers. The Administrator wished all happiness and prosperity to the people of Mahe. I.K. Kumaran then hoisted the Indian Flag on the Government House maidan and addressed a meeting. The jubilant people gave vent to their joy in a thousand ways. The Indian tricolour fluttered on house tops decorated with festoons. I.K. Kumaran constituted a 15-member Council with himself as the President to carry on the administration of the region. 272

The *de facto* transfer of the 228-year-old French establishment of Mahe to the Indian Union took place on 1 November 1954 when I. K. Kumaran handed over charge to D.M. Jejurikar, the first Administrator of liberated Mahe.

Yanam Region :

Following the 8 June 1948 Agreement, election to the Yanam Municipal Council was proposed to be held on 24 October 1948. Though the total number of voters was only 1,500, they were entitled to elect twelve members to the Municipality. A few days prior to the elections, members of the French India National Congress Party came under the threat of the police who forcibly removed the Indian National flag from their residences.

K. Veeraswamy, its President reported that he and his supporters were threatened by the French police with danger to their lives and property if they were to organise a party and contest the ensuing elections on the Congress ticket. There was, therefore, no contest on behalf of the French India National Congress Party.²⁷³ The Socialist Party led by Kamichetty Parasuramarao Naidu and the Mahajana Party under the joint leadership of Yerra Jagannadharao and Madimchetti Sattayya entered the election fray.²⁷⁴

The Mahajana Party favoured merger of Yanam with the Indian Union. The Socialist Party, because of its anti-merger stand, had the support of the Administration. G. Jagannadharaju reached Yanam a little before the election as an observer on behalf of the All-India Congress Committee. The entire election was, however, vitiated by corrupt practices. The candidates and supporters of the Mahajana Party were assaulted by anti-merger elements. In the midst of all the lawlessness and hooliganism that prevailed, the Mahajana Party could not actively participate in the elections.²⁷⁵ Naturally so, the candidates of the Socialist Party captured the municipal administration.

Between October 1948 and April 1954, the settlement did not witness any significant political activity. However, the nationalist leaders here received a shot in the arm when they learnt that the Councillors and Mayors of communes in Pondicherry had unanimously demanded merger of the establishments without a referendum.

The Administrator of Yanam immediately convened a meeting of leading citizens and appealed to them not to start a pro-merger agitation.²⁷⁶ At the same time, R. Dadala, Secretary of the French India Central Merger Congress and leader of the merger groups of Yanam, in an appeal addressed to the people, said, "Andhra was one of the pioneer provinces in the freedom struggle of India and is recognised to be one of the most politically conscious parts of our country. This being so, Yanam should not lag behind anybody in the matter of liberating the French settlements from French domination."²⁷⁷ Shortly after, an Action Committee was formed in Kakinada with Pydah Venkata Narayana as President and P. Bhayankarachari as Secretary to lend support to the merger movement. The meetings arranged under its auspices near the Yanam bridge from time to time exhorted the people to join hands to fight for merger with the Indian Union. The Action Committee also resorted to picketing carts and boats carrying goods to Yanam.²⁷⁸

As the movement for merger gained strength in and around Yanam the Government of Andhra Pradesh took necessary security measures to avert any untoward incidents on the borders. Political parties, including the Communist Party, held demonstrations and public meetings almost daily on the borders of Yanam calling for its immediate merger with India.²⁷⁹

In a surprise development on 29 April 1954, five leading citizens of Yanam forwarded to Prime Minister Nehru the text of a resolution they had adopted in the Town Hall. The resolution reiterated the demand for immediate merger with the Indian Union. The resolution was also cabled to the President of the National Assembly and the Council of the Republic and the Assembly of the French Union. The signatories of the resolution included, among others, Madimchetti Satyanandam, Mayor and Kanakale Tatayya, Municipal Councillor and Member of the Representative Assembly.²⁸⁰

Meanwhile, leaders of pro-merger parties organised meetings to rally round the masses to voice their grievances. On 1 May 1954 a public meeting was held near the Yanam bridge which was presided over by M. Satyanandam, Mayor of Yanam. The speakers made it plain that acts of hooliganism and other repressive measures adopted by the Administration will not suppress the popular movement but would only help to strengthen it. Kamichetty Venugopalarao Naidu, the Grand Old Man of Yanam, who was Yanam's Mayor and Assembly member for a number of years, exhorted the people to take a lesson from the freedom fight of their brethren in the Indian Union and appealed to them to liberate their territory from foreign domination.²⁸¹ Shortly after, Madimchetti Sathianarayana Murthi, Mayor of Yanam was suspended from office by the Commissioner, on the pretext that his activities were detrimental to the security of the settlement.²⁸² When the people came to know that the elected representatives of Yanam had fled to Kakinada more and more families started leaving Yanam. Meanwhile pro-mergerites and houses of nationalist leaders who had taken shelter in Indian Union came under the attack of hooligans. Scores of persons armed with lathis and daggers roamed the streets of Yanam terrorising the nationalist elements. A large number of people sought refuge in the adjoining Indian territory. The Government of India lodged a strong protest with the French Indian authorities over the provocative incidents and acts of violence and goondaism taking place in Yanam.²⁸³

The situation in Yanam deteriorated so much that Escargueil, Secretary-General of Pondicherry visited Yanam to enquire into the reported acts of hooliganism and looting. He met the pro-merger leaders and admitted that there was truth in the allegations.²⁸⁴ The Secretary-General further assured the leaders who met him that an officer would be sent from Pondicherry to conduct an enquiry into the incidents and compensation would be paid to those who sustained loss.

Shortly after, Sela, Administrator of Yanam was summoned back to Pondicherry. On 11 June, it was announced at Pondicherry that M. Siva, Justice of Peace at Yanam was being appointed as the Acting Administrator.

On 12 June 1954, a number of hired gangsters opened fire on a refugee camp in Indian territory injuring two volunteers and two police constables on patrol duty. Citizens of Yanam were enraged; they crowded the refugee camp and requested the refugee leaders to enter Yanam and take over the administration. Led by R. Dadala, M. Satyanandan, Mayor, K. Tatayya, Member French India Assembly, K.V. Gopala Rao and K. Parasuram, former Mayors of Yanam, Y. Satyanarayanamurthi and other Municipal Councillors, the refugees entered Yanam on the morning of 13 June. The town was overrun by the liberation forces without encountering much resistance. They occupied the public offices and took charge of the administration. The Acting Administrator was left with no other choice but to inform the Commissioner, of the fall of Yanam. In a telegram addressed to Pondicherry, the Acting Administrator informed, "Town taken at six o'clock this morning, despite resistance. All public buildings occupied by the party. Deaths none, several slight injuries. Choice given to the services to work at Yanam or to return to Pondicherry."²⁸⁵

Soon after a huge public meeting was held when Mayor Satyanandam formally declared the independence of Yanam and requested the Indian Government to take over its administration and merge the establishment with the Indian Union without a referendum. R. Dadala assumed charge as Administrator. A Council of Administration consisting of M. Satyanandam, President, R. Tatayya, Vice-President, K. Parasuram, Yerra Satyanarayanamurthi and Kona Narasayya was sworn-in to carry on the administration.²⁸⁶ The ceremony marked the end of the 183 year-long French rule in Yanam.

Shortly after, Siva, the erstwhile Administrator of Yanam in a statement declared, "that it was indeed a sorry spectacle that France, which was the first country to overthrow autocracy and establish democracy still clings to these tiny possessions in India regardless of the intense desire of the people therein to be united with their own mother country. It is certain that this abnormal attitude is not of the French people but of the short-sighted French ruling class. The French bureaucracy refuses to recognise the powerful world currents against colony rule wherever it is and in whatever form. At the present juncture, it is a matter of conscience for me that I should not be a part of the administrative and judicial machinery of the French Government, which is now desperately attempting to suppress the aspirations and the liberties of the people and is indulging in brutal and inhuman treatment of the peaceful and patriotic people of French India. I have, therefore, decided to dissociate myself from the French Government by resigning my posts as Judge and Acting Administrator of Yanam and to consecrate my life, my knowledge and my energy to the service of my Motherland." 287

The people of Yanam formally celebrated their liberation on 27 June with great enthusiasm alongwith thousands of people who arrived from the surrounding villages. After a 21-gun salute, at 6 a.m. Satyanandam, Mayor, hoisted the Indian National Flag and took the salute at a police parade. On 1 July 1954, Yerra Satyanarayanamurthi took over from Dadala as the Administrator of Yanam.

The settlement merged *de facto* and officially with the Indian Union. when A. Veda took over as the Administrator of Yanam on 1 November 1954.

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CHAPTER—III

PEOPLE

I. Population

Census History :

The first attempt to maintain a systematic account of the population of the establishments was made in 1842 when the system of maintenance of register of births, deaths and marriages was introduced by the *arrêté* of 25 June 1842. ¹ Registration was not, however, declared compulsory. The system, therefore, failed as the people did not care to go to the office of the Registrars for registration. According to one estimate, 25 per cent of the births were not registered. ² Only deaths were reported without fail for fear of judicial enquiries. Even so, the *Annuaire* of the Administration published in 1840 contained statistics of the population of Pondicherry as it stood on 31 December 1838. How this figure of population was arrived at is not known. It has been suggested that figures must have been arrived at by adding the number of births and deducting the number of deaths from the figures that stood as on 31 December. ³ This is unlikely, as the system of registers was introduced only after 1842. The *Annuaire* gave the population in four categories as European, Mixed, Indian and Muslims. The break-up of males and females was also given. This form was changed in 1849 showing Hindus and Muslims together as natives.

1852 Census : The first regular census is understood to have been conducted in the year 1852. Pointing out the large increase in the population of Pondicherry establishment, the *Annuaire* of 1852 remarked that it was the result of a "census undertaken with care on the spot".

There are no indications of any census operation having been carried out between 1852 and 1890. The registration of births, deaths and marriages was made compulsory in 1854. Although population figures continued to appear every year in the *Annales*, these annual figures must have been computed with the help of the registers of births and deaths.

1891 Census : The first officially declared census was conducted only in 1891. All houses, huts, choultries and other buildings in the town and villages were first numbered by the officials of the Revenue Department. The census count comprised two distinct operations viz., a preliminary count and a final count. The details collected at the time of the enumeration included the name, parentage and surname of each inhabitant, his civil status, sex, place of birth, date of birth, age, religion, caste, mother-tongue, languages known other than mother-tongue, nationality, electoral constituency, profession or means of living, educational qualification and physical disabilities such as blindness, deafness, dumbness from birth, lunacy and leprosy.

According to the census results published in the *Annuaire* of 1891 the total population stood at 2,52,370 with Pondicherry claiming 1,78,179, Karaikal 60,388, Mahe 8,536, and Yanam 5,267.

Census of 1901-1948 : The next census was held in 1901. Instructions were published for the first time authenticated by the Governor. These instructions were re-issued every 10 years in 1911, 1921, 1931, 1941 and in 1948 without any change in their contents. Interestingly the census operations in the French establishments during 1901, 1911 and 1921 synchronised with the reference dates fixed in British India. The Census of India documents of 1911, 1921 and 1931 also furnished the details of population of French India.

The 1911 census introduced the innovation of collecting data on the various sects of Hinduism viz., Vaishnavites, Saivites, besides counting Buddhists, Jains, etc. Another interesting feature of the 1911 census was the collection of data on castes and sub-castes. In the case of Muslims, the census required them to indicate the sects viz., Pathans, Sheik, Syed, Moghal, Mopla and Labhai. Even Christians were required to indicate the caste alongside their religious denomination. It was also compulsory to record the place of birth of one's father and mother in order to determine the nationality of the person concerned. In 1947 these instructions were repeated to enable the population to claim French nationality before 1 January 1948.

Another interesting fact which obviously has not attracted sufficient attention was that, in French India as in France, the census operations were held not once in 10 years, but once in five years at least since 1921. Understandably the census in 1916 was not held due to the war emergency. But it is certain that census operations were carried out in 1926 as well as in 1936. 4

The next quinquennial operation which ought to have been held in 1941 was not held probably owing to World War II. The next census operation was held only in 1948. This was the last census held in French India. The population figures were published in the official gazette and the census records sent to the archives of the **Bureau des Affaires Politiques**.

1951 *Census of India* : Chandernagore was *de facto* merged with West Bengal in 1948. The 1951 All-India census covered only Chandernagore. No census was carried out in French India the same year.

1961 *Census of India* : By the time the 1961 census was underway, the four remaining establishments had *de facto* become part of India. However, the territory differed from any other State or Union Territory in its constitution, legislation and administration. It was not part of India *de jure*, which meant that the provisions of the Indian Constitution could not be applied to Pondicherry as in the rest of India. The Indian Census Act was extended to Pondicherry on 1 July 1959 as a special case by the President under the Foreign Jurisdiction Act, 1947 which facilitated the conduct of census in 1961.⁵ The entire operation went off well except for some serious difficulties in the enumeration of the inmates of the Ashram.

According to the Census Superintendent, the semi-literate and illiterate sections of the people seem to have 'presented a real problem to the enumerator'. "In spite of the goodwill on their part, they could not express their ideas clearly on demographic questions. Similarly on economic questions, incorrect or wrong answers were returned. There was difficulty to explain the distinction between industry and occupation. Family worker, single worker and household worker were terms which were often confused."

Commenting on the merits of the French system, the report stated that "the French system had much to commend it and was simpler than the Indian system. Suffice it to say, the French Administration had perfected a system of census taking which can be a model to any enlightened administration at least in concept and theory".⁶

1971 *Census of India* : The 1971 census is the Second All-India Census which also covered the Union Territory of Pondicherry.

Population and its growth*

Although there are isolated references to population in published as well as unpublished records, we have no reliable data of the population of Pondicherry prior to 1838. There are reasons to believe that Pondicherry was not more than a small port with about 500 inhabitants before the French came to set up a 'loge' here.⁷ According to one source, the population of Pondicherry town and its immediate surroundings was 30,000 in 1703.⁸ By 1706 it reached 40,000. In 1706, the year of François Martin's death, Pondicherry had a population of about 40,000.⁹ This is said to have risen to 60,000 approximately in 1716 and 80,000 approximately in 1735 and must have remained steady for the next 25 years. According to Collin de Bar, the population of the territory under French control was 80,000 in 1700.¹⁰ In 1735, it is said to have risen to 1,20,000. All of these figures are probably nothing more than guesstimates.

According to a more reliable record, the population of Pondicherry in 1760 was about 80,000 of whom approximately 4,000 were Europeans or Metis. By the year 1777 it is said to have declined to 28,321.¹¹ In 1780 Pondicherry's population rose to 50,000. Then it dwindled to a mere 20,000 in 1793.

These figures can be accepted only with some reservation. Figures considerably varying from them may be found mentioned in other sources. While furnishing the figures, the sources do not mention exactly the area covered reducing thereby the value of these figures for demographers.

We do not know the population of the establishments when they were restored to the French in 1816. However, the famous papers of Cordier † throw some light on the population of Karaikal between 1791 and 1819:

			1791	1817	1819
Males	..	..	8,827	9,331	9,818
Females	..	..	10,198	10,280	10,990
Boys	..	..	3,973	3,690	3,986
Girls	..	..	3,104	3,716	3,342
Slaves	..	..	583	—	—
Total	..	..	26,685	27,017	28,136

* The population of Chandernagore had been excluded from the purview of this study.

† Administrateur de Karaikal.

By 1823, the population of Karaikal region increased to 33,286 including Europeans who numbered 110. ¹² Reliable data of the population of the establishments are furnished by the *Annuaire*s since 1838 on which year (as on 31—12—1838) the population was 79,528 in Pondicherry and 42,511 in Karaikal.

Given below is a region-wise statement of population from 1851 to 1971:*

Year			Pondicherry	Karaikal	Mahe	Yanam	Total
1851	..	..	82,076	59,872	3,919	6,464	1,52,331
1861	..	..	1,25,992	52,643	6,878	6,450	1,91,963
1871	..	..	1,33,588	92,482	8,064	5,728	2,39,862
1881	..	..	1,39,201	93,066	8,166	4,552	2,44,985
1891	..	..	1,78,179	60,388	8,536	5,267	2,52,370
1901	..	..	1,74,456	56,595	10,298	5,005	2,46,354
1911	..	..	1,84,840	56,577	10,729	5,033	2,57,179
1921	..	..	1,74,343	54,356	10,827	4,630	2,44,156
1931	..	..	1,83,555	57,394	12,430	5,249	2,58,628
1941	..	..	2,04,653	60,555	14,092	5,711	2,85,011
1948@	..	..	2,22,572	70,541	18,293	5,853	3,17,259
1961	..	..	2,58,561	84,001	19,485	7,032	3,69,079
1971	..	..	3,40,240	1,00,042	23,134	8,291	4,71,707

It will be observed that there were drastic fluctuations in the population of the various settlements during the above period. These variations cannot adequately be explained unless viewed against the background of the impact of epidemics of small-pox and cholera which ravaged the country from time to time. Famines too must have had their toll. The attractions of pastures new must have induced large-scale emigration. The devastations of floods and famines too could have had an impact on the population. A study of the dynamics of population will not bring consolation to a demographer, unless the fluctuations of population are adequately accounted for in the light of such phenomena. This task is better left to demographers themselves.

* This statement is based on the figures furnished in the *Annuaire*s.

@ J. O. 1948, p. 146.

Between 1851 and 1891 i.e., within a period of 40 years the population of Pondicherry region more than doubled, although since 1891 the upward trend showed signs of slight set-backs. From 1891 onwards the population remained almost static for about four decades and even registered a decline between 1910-20. Since 1931, the population showed a tendency towards steady increase. The average increase per annum between 1931-1948 was 2,300 which amounts to 1.3 per cent. per annum. By 1961, the population had more than trebled. According to the 1971 census the population was 3,40,240.

During the same period, the population of Karaikal underwent major fluctuations. The population which stood at 59,872 in 1851 declined to 52,643 in 1861. Within the next five years, the population showed spectacular increase to reach 92,704 which amounted to an annual rate of increase of 16 per cent. No plausible explanation is available for the sharp increase in population during this period. It is quite possible that chances of emigration to the colonies attracted the population from the surrounding countryside to Karaikal. The order of 17 June 1859 in fact permitted emigration of population from Pondicherry and Karaikal to Reunion. Thereafter the population remained steady for almost twenty years and declined sharply in 1889 to 60,760. Interestingly, it will be observed that the posts of Controller of Emigration in Pondicherry and Karaikal were abolished on 10 February 1898. Thereafter the population remained almost static for more than five decades i.e., upto 1941 when the population stood at 60,555. There was a significant rate of decline between 1911-21. The region was often subjected to the ravages of epidemics of small-pox and cholera. The influenza epidemics of 1918 and 1919 were particularly more severe in Karaikal. Since then the population of Karaikal showed steady increase and crossed the one hundred thousand figure in 1971.

The population of Mahe which was 3,511 in 1853 almost doubled the very next year. This was not a demographic phenomenon. In fact, the Naluthara enclave was restored to the French only in 1853 which explains the sudden spurt in the population figure. Thereafter the population moved up and down, slowly picking up strength to cross 12,430 in 1931 and 14,092 in 1941. In 1948 it rose to 18,293. Thereafter the growth showed signs of sluggishness, due perhaps to the unsettled political conditions in the establishment. Nevertheless, the population rose to 19,485 in 1961 and reached 23,134 by 1971.

As for Yanam, the population of this establishment in 1851 was 6,464. Even after fifteen years i.e., in 1865 it was 6,756. The population showed a declining trend during the next twenty-five years i.e., upto 1890 when the population stood at 4,050. According to the 1891 census the population was 5,267 which was 30 per cent. more than that of the previous year. The population figure of 1890 might have been computed from the entries in the birth and death registers; and it is possible that in the previous years, all the births were not properly recorded in Yanam. For the next fifty years, i.e. upto 1941 the population remained almost the same (5,711) with slight vagaries from year to year. In 1948 it increased to 5,853. By 1961, it was 7,032. The 1971 census counted the population as 8,291.

The total population of the Union Territory of Pondicherry according to the 1971 census is 4,71,707 of which 2,37,112 are males and 2,34,595 females.

The following table highlights the difference in the rate of increase of population among the four regions :

Area	Percentage increase		
	1901-61	1921-61	1940-61
Territorial average	49.82	51.17	16.34
Pondicherry region	48.21	48.31	16.17
Karaikal region	48.42	54.54	19.08
Mahe region	89.21	79.97	6.52
Yanam region	40.50	51.88	20.14

Taking the average growth of population in the Territory for the period 1901-61 as 49.82 and for 1921-61 as 51.17 we could find that Mahe had shown a growth rate above the Territory's average during the period 1901-61 and 1921-61. When compared to the Territory's average of 16.34 per cent, Pondicherry, Karaikal and Yanam have shown less percentage increase during 1901-61. Pondicherry region has been showing lower rate of increase than the Territory's average during the periods 1901-61, 1921-61 and 1948-61. Pondicherry and Karaikal show population growth in line with the Territorial average, and can be said to have a regional pattern. The other two regions show a different trend. As on 1961, 92.82 per cent. of the Territory's population lived in these two regions. 13

Since merger, the pattern of growth of population has remained almost steady in Pondicherry and Karaikal. It has shown a tendency to grow faster in Yanam and to slow down in Mahe.

The statement below gives the percentage variation of population since 1948 :

Area	1948-61	Annual increase in %	1961-71	Annual increase in %
Union Territory	16.33	1.25	27.80	2.78
Pondicherry	16.17	1.24	31.58	3.16
Karaikal	19.01	1.46	18.09	1.81
Mahe	6.52	0.05	18.72	1.87
Yanam	20.14	1.55	17.90	1.79

The percentage increase of population in 1961 with 1948 as the base year is 16.33 and the decadal increase upto 1971 is 27.80 per cent. The increase for the corresponding period was 22.3 per cent in Tamil Nadu and 24.8 per cent for All India. The annual percentage increase of population region-wise is the highest for Pondicherry and the lowest for Yanam. Mahe comes second and Karaikal third.

During 1948-61, however, the annual rate of increase was the highest in Yanam probably due to large-scale migration to the region from the adjoining areas. The lowest rate of increase was registered in Mahe which for the most part, passed through a phase of political repression and instability. As between Karaikal and Pondicherry, the rate of increase was higher in Karaikal than in Pondicherry. This again may be explained by the fact that the freedom movement was more virulent in Pondicherry than in Karaikal, turning the situation in Pondicherry relatively more insecure than in Karaikal. The period also witnessed large-scale migration of handloom weavers from the region to the adjoining areas of Tamil Nadu.

Whether the increase in population is due to new reclamation of land, new irrigation or road communication developments or new industrial projects or urban centres or immigration or freedom from devastating epidemics like cholera, plague, etc., we cannot say with any measure of accuracy. These again are fields to be explored by demographers. But one point must be borne in mind. With the advent of freedom, a wide range of measures to improve the economic and social conditions of the people were undertaken. This may perhaps have resulted in these areas recording a sizeable percentage increase during 1948-61.

Given below is a statement showing the commune-wise increase of population vis-a-vis the average population per commune :

	<i>Commune-wise population between 1909-71</i>				
	1909*	1931	1948	1961	1971
1. Pondicherry Commune	46,738	43,499	59,835	73,387	90,637
2. Ariyankuppam „	10,913	20,636	18,793	20,226	26,269
3. Mudaliyarpettai „	15,708	14,846	22,396	27,560	43,585
4. Ozhukarai „	25,023	28,899	35,311	39,217	57,785
5. Mannadipattu „	19,789	20,963	23,232	25,963	32,133
6. Villiyanur „	20,412	23,489	27,991	30,800	39,134
7. Bahur „	16,847	18,352	20,591	23,890	30,312
8. Nettappakkam „	15,261	12,971	14,423	17,518	20,385
9. Karaikal „	20,380	17,038	23,008	29,309	36,152
10. Tirunallar „	11,402	12,558	14,632	17,635	20,445
11. Niravi „	7,069	7,259	8,126	9,754	11,117
12. Nedungadu „	7,611	5,617	7,001	8,184	9,846
13. Kottuchoheri „	5,772	6,605	8,297	9,228	10,949
14. Grand' Aldée „	8,225	8,317	9,477	9,891	11,533
15. Mahe „	10,095	12,430	18,293	19,485	23,134
16. Yanam „	5,249	4,586	5,853	7,032	8,291

* The 16 commune set-up came to be established only in 1908. Hence the figures relate to the period since 1909.

In-between 1909 and 1931 the population of Mudaliyarpettai, the hub of industrial activity, declined from 15,708 to 14,846 and rose to 22,396 in 1948. The decline may have been caused by the protracted labour trouble in the textile mills which came to be somewhat settled in 1936. The peace that had returned to the textile industry must have caused the influx of population to the commune. Moreover, it is interesting to note that during the same period, the population in Ariyankuppam Commune had increased sharply and then declined during the 1931-48 period.

Percentage variation in the four regions and adjacent districts 1901-1961 :

It may be of interest to compare the growth of population in the various regions with the adjoining districts. Given below is a table giving the percentage variation in the four regions and the adjacent districts between 1901-1961: 14

<i>Area/District</i>	1901-61	1961-51	1951-41	1941-31	1931-21	1921-11	1911-01
Pondicherry Region	+48.21	+16.17	+8.75	+11.49	+5.28	-5.68	+ 5.95
South Arcot Dist.	+44.74	+ 9.77	+6.44	+ 6.28	+5.79	-1.80	+12.19
Karaikal Region	+48.42	+19.08	+16.49	+5.51	+5.59	-3.93	-0.03
Thanjavur Dist.	+44.39	+ 8.82	+16.36	+7.44	+2.40	-1.53	+5.25
Mahe Region	+ 89.21	+ 6.52	+29.81	+13.37	+14.81	+0.91	+4.19
Kozhikode Dist.	+127.19	+26.72	+23.52	+12.16	+15.96	+2.71	+8.66
Cannanore Dist.	+126.11	+29.47	+22.44	+12.64	+15.21	+2.81	+6.91
Yanam Region	+40.50	+20.14	+ 2.49	+ 8.80	+13.39	-8.01	+ 0.56
East Godavari Dist.	+94.80	+13.32	+16.45	+12.52	+14.31	+1.70	+12.86

"During the decade 1901-1911 the former French settlements showed lesser variation than the neighbouring districts. In the decade 1911-21, the areas except Yanam showed a similarity to the adjacent districts in that they have shown either a decrease or a small increase as exhibited by the adjacent areas. In the decade 1921-31, Karaikal alone has shown a higher increase than the adjacent districts. During 1931-41 Pondicherry and Mahe have shown increases more than that of the adjacent districts while Karaikal and Yanam have shown lesser percentage of increase. Except Yanam, the other areas have shown higher percentage of increase compared to adjacent districts during the period 1941-51." 15*

* The 1948 population was adopted as the 1951 population by census authorities for the purpose of this comparative study.

During the period 1951-61 except Mahe, all the other regions have shown greater variation when compared to the nearby districts. For the period 1901-61 the percentage increase in Pondicherry and Karaikal is slightly higher than that of South Arcot and Thanjavur Districts. The increase during the same period in Mahe and Yanam is considerably less than that of Kozhikode and Cannanore and East Godavari Districts to which the two regions are adjacent .16

General distribution and density :

The Territory covering only 0.01 per cent. of India's total area had 0.08 per cent. of India's population according to the 1961 census. This increased to 0.09 per cent. according to the 1971 census.

Among the four regions, Pondicherry with 62.69 per cent. of the Territory's area had 70.06 per cent of the population in 1961. Karaikal with 31.84 per cent of the area had 22.76 per cent of the population. Mahe with 1.77 per cent of the area had 5.28 per cent of the population. Yanam with 3.70 per cent area had only 1.90 per cent of the population.

Region-wise details of variation in density of population between 1851-1971 are given below :

Area	Density per sq. km. in 1851	Density per sq. km. in 1948	Percent- age variation between 1851-1948	Density per sq. km. in 1961	Percent- age variation between 1948-61	Density per sq. km. in 1971	Percent- age variation between 1961-71
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Union Territory	.. 317	661	+108.5	769	+16.3	983	+27.8
Pondicherry region	.. 283	767	+171.0	891	+16.3	1,173	+31.6
Karaikal region..	366	438	+ 19.7	521	+18.9	621	+19.2
Mahe region ..	735	1,233	+ 67.8	2,165	+75.6	2,570	+18.7
Yanam region ..	323	294	— 8.98	351	+19.4	415	+18.0

Between 1851 and 1948 the overall density of population of the Territory increased by 108.5 per cent. The greatest part of the increase had taken place in Pondicherry region whereas there was a slight increase in Yanam. Between 1948 and 1961, the increase was considerable only in 1954 after some years of political strife and an intensive phase of the freedom movement. Between 1961-71 the largest concentration of population has taken place in Pondicherry region with 31.6 per cent and the lowest in Yanam with 18.0 per cent.

Given below is the commune-wise density of population between 1948 and 1971 :

<i>Area</i>		<i>Density per sq. km. in 1948</i>	<i>Density per sq. km. in 1961</i>	<i>Density per sq. km. in 1971</i>
Pondicherry	..	9,651	11,836	14,619
Ariyankuppam	..	770	829	1,077
Mudaliyarpettai	..	1,671	2,051	3,253
Ozhukarai	..	1,024	1,137	1,675
Mannadipattu	..	365	408	505
Villiyannur	..	423	462	591
Bahur	..	374	434	550
Nettappakkam	..	476	578	672
Karaikal	..	1,211	1,542	1,903
Tirunallar	..	344	415	481
Niravi	..	470	564	643
Nedungadu	..	292	341	410
Kottuchcheri	..	323	359	426
Grand' Aldée	..	491	512	598
Mahe	..	2,033	2,165	2,570
Yanam	..	293	352	415

Commune-wise, Nedungadu in Karaikal region has the lowest density while the highest is that of Pondicherry, obviously because it is the capital city of the Territory.

Looking at villages, the population per inhabited village is the highest in Mahe region being 3,845 while it is as low as 573 in Karaikal region. In Pondicherry region the average population comes to 775. In Mahe there is no village with less than 2,000 population. Karaikal has a large number of smaller villages than Pondicherry. Suffice to add that the entire region of Yanam is treated as a town.

It will be of interest to note that the density of population in all the four regions is much higher than those of the adjoining districts of Tamil Nadu, Kerala and Andhra Pradesh. There are in fact no vast stretches of hills, forests, deserts and swamps within the Territory that help reduce the overall density of population. It is perhaps also an index of the relatively better conditions of prosperity of the regions.

Sex-ratio :

The following table gives the region-wise sex-ratio of the population of the Territory between 1851-1971 :

		(Per thousand males)				
Area		1851	1875	1900	1961	1971
Union Territory	..	1,027	971	1,037	1,013	989
Pondicherry region	..	1,070	927	1,002	988	968
Karaikal region	..	958	1,022	1,174	1,056	1,023
Mahe region	..	1,248	1,050	907	1,175	1,169
Yanam region	..	1,033	1,160	1,114	1,021	1,024

In 1961 females were in excess of males for the entire Territory unlike in the country and in other States. This may be attributed to the slow progress of industrialisation and the existence of less developed urban areas in the Territory. Another strange aspect was that there was a higher concentration of women in urban areas. This peculiarity was found in Pondicherry and Karaikal regions. In Mahe, the urban sex-ratio was less than the rural sex-ratio.

A comparison of the position of sex-ratio in 1961 with that of 1971 shows that the sex-ratio in the Territory has declined from 1013 to 989. This follows the trend in most of the States and in India as a whole. The corresponding 1971 figure is 933 women for every 1,000 men for all India and 978 women for Tamil Nadu.

The region-wise position in 1971 is that there are 31 women less for every thousand men in Pondicherry indicating a further decline in the sex-ratio. The sex-ratio has shown considerable decline in Karaikal. Nevertheless, there are 23 women in excess (against 56 in 1961) for every 1000 men. In Mahe, the ratio has shown a slight decline, whereas in the case of Yanam it has slightly increased. On the whole, the pattern of sex-ratio in the Territory is not very abnormal.

Urban and rural population :

The system of classification of population as urban and rural was not adopted during the French period. This concept was first introduced in this Territory only in 1961. As such, there is little scope for an in-depth study of the problem of urbanisation in the Territory.

For an area to be reckoned as urban, it was prescribed that it should have a population of 5000 and 75 per cent of the male population should depend on non-agricultural resources for their livelihood and the density of population in the area should be over 1000 per sq. mile. The following are the places classified as towns by the 1961 census : Pondicherry and Muttiyalupettai in Pondicherry region, Karaikal town in Karaikal region, Mahe town in Mahe region and the entire commune of Yanam.

All the five towns satisfied the population and density criteria. The third criterion that 75 per cent of the adult male population should depend on non-agricultural livelihood was satisfied only by Muttiyalupettai town. The fact that the other towns are the headquarters of the respective regions might perhaps have influenced the decision to declare Pondicherry, Karaikal, Mahe and Yanam as urban. In the case of Yanam a large number of rural areas which lie isolated from one another have also been treated as part of the urban area. 17

The urban population according to the 1961 census was 88,997 (24.11 per cent.) as detailed below :

Pondicherry	..	40,421
Mutiyalupettai	..	11,341
Karaikal	..	22,252
Mahe	..	7,951
Yanam	..	7,032
Total	..	88,997

In all, 79.5 per cent of occupied residential houses were in rural areas, while 20.5 per cent. were in urban areas. Pondicherry region had 83.5 per cent. houses in rural areas followed by Karaikal with 77.5 per cent. and Mahe with 63.9 per cent. Out of 100 persons living in the Territory 75.89 per cent. lived in rural areas and 24.11 per cent. in urban areas. Region-wise Pondicherry led with 79.98 followed by Karaikal and Mahe with 73.51 and 59.19 per hundred of population, respectively

There were no class I & II towns in the Territory. There were two towns in class III, one in class IV and two in class V. The region-wise percentage of rural and urban population in 1961 is given below :

Area		Urban population	Rural population	Percentage of urban population	Percentage of rural population
Union Territory	..	88,997	2,80,082	24.11	75.89
Pondicherry region	..	51,762	2,06,799	20.02	79.98
Karaikal region	..	22,252	61,749	26.49	73.51
Mahe region	..	7,951	11,534	40.81	59.19
Yanam region	..	7,032	Nil	100.00	

It may be useful here to cite the predominant characteristic of the town. Pondicherry has been classified as a port town. "The argument in favour of this classification is, irrespective of the fact whether or not majority of the workers are engaged in river and ocean transport, the town as a port is still the dominant one around which the other characteristics have slowly developed in course of time. In other words, the other features owe their origin primarily to the life of the town as a port which still continues even if these other features overshadow its functions as a port."¹⁸ However, in Pondicherry 45.75 per cent. of the working population depend on other services. Considering the range and scope of industries located in the town, it will be more appropriate to describe Pondicherry as an industrial town, in preference to being called a port or administrative town. Muttiyalupettai may be treated as a town of artisans or industries. Karaikal too may be called an industrial town. Mahe is primarily an administrative and residential town. Yanam tends to be an industrial town.

Mahe region is the most crowded among the constituent rural areas. Pondicherry comes next, but the variation between the two is very large. Karaikal has the least number of houses per square mile showing the less congested nature among the rural areas of the Territory.

The village-wise distribution of population varied from region to region as evident from the table below :

<i>Region</i>			<i>No. of (Census) villages</i>	<i>Average population per inhabited village</i>
Union Territory	..	..	388	722
Pondicherry region	..	..	267	775
Karaikal region	..	..	118	523
Mahe region	..	..	3	3,845
Yanam region	..	..	Nil	—

The table below gives the percentage of rural and urban populations to total population in the Union Territory and the four regions according to the 1971 census :

<i>Area</i>	<i>Population 1971 Census</i>		<i>Percentage of urban to total population</i>	
	<i>Rural</i>	<i>Urban</i>	1961	1971
Union Territory	2,73,419	1,98,288	24.11	42.04
Pondicherry region	1,85,295	1,54,945	20.02	45.58
Karaikal region	73,962	26,080	26.49	26.08
Mahe region	14,162	8,972	40.81	38.81
Yanam region		8,291	100.00	100.00

The 1971 census identified 334 villages in all. Details of average population per village region-wise are given below :

<i>Area</i>	<i>No. of (Census) villages</i>	<i>Average population per inhabited village</i>
Union Territory	334	819
Pondicherry region	213	870
Karaikal region	118	627
Mahe region	3	4,721
Yanam region	Nil	—

The increase in the average population of villages in Pondicherry was not so much due to a real increase in rural population, but to the decline in the number of suburban villages which were merged with the towns of Pondicherry, Muttiyalupettai and Ozhukarai.

The proportion of urban population in the Territory increased from 24.11 to 42.4. This is chiefly due to the increase in the number of towns qualified to be urban in 1971 as compared to that of 1961 particularly in Pondicherry region. In Karaikal and Mahe the proportion of urban population has slightly gone down.

The following table gives the number of towns and the population in each class of town in the Territory according to the 1971 census: 19

<i>Sl. No.</i>	<i>Particulars</i>	<i>Population in 1971 Census</i>
1.	Class I towns (1,00,000 and above)	..
2.	Class II towns (50,000 to 99,999)	.. 90,637
3.	Class III towns (20,000 to 49,999)	..
	(i) Muttiyalupettai	.. 42,933
	(ii) Karaikal	.. 26,080
	(iii) Ozhukarai	.. 21,375
4.	Class IV towns (10,000 to 19,999)	.. —
5.	Class V towns (5,000 — 9,999)	..
	(i) Mahe	.. 8,972
	(ii) Yanam	.. 8,291
6.	Class VI towns (less than 5,000)	..
	Total	.. 1,98,288

The rural and urban composition of the population of Pondicherry and Karaikal regions is akin to that found in the adjacent districts of Tamil Nadu. It is only in the smaller regions of Yanam and Mahe that urbanisation is high, because the towns of Mahe and Yanam dominate the region concerned and make the population more urban. The percentage of rural population to total population is 57.96 per cent. as against the all India percentage of 80.1 and Tamil Nadu's 69.8. What is evident is that urbanisation is on the increase in the Territory and seem to gather momentum.

During the 1961 census a new concept of 'Town-group' was introduced. Towns which are either contiguous or near each other and have separate legally constituted civic administration like Municipality, Panchayat or a Township were grouped together to form a town group. For statistical purposes, such a town group was treated as a unit. However, no such town group was identified in this Territory. But it was predicted that Muttiyalupettai and Pondicherry which lie near each other may develop into a zone of concentration.

The concept of 'urban agglomeration' was introduced during the 1971 census. An urban agglomeration is a continuous urban spread constituting a town and its adjoining urban outgrowth or two or more physically contiguous towns together with continuous, well recognised urban outgrowths, if any, of such towns. According to this concept, the urban portions of Pondicherry, Mudaliyarpettai and Ozhukarai form the Pondicherry urban agglomeration. The population of the urban agglomeration is 1,53,325 which is less than the combined population of the towns of Pondicherry, Mudaliyarpettai and Ozhukarai by only 1,620.

(For details of Scheduled caste population see Chapter XVII.)

Migration :

All the four regions of the Territory witnessed considerable movement of population during the last three hundred years. For nearly 120 years i.e., from 1673 to 1793, the movements of population were caused by the Carnatic wars fought between the French and the British with the native rulers siding with either one or the other of the rivals. Periods of famine and pestilence which carried a heavy toll did occur from time to time as evident from contemporary records. Although this period and till the end of the nineteenth century the 'export of slaves' was a flourishing trade and the French ports were no exception. In a letter to the Court of Directors in 1789, Lord Cornwallis wrote, "An infamous traffic, it seems, has long been carried on in this country by the low Portuguese, and even by several foreign European seafaring people and traders in purchasing and collecting native children in a clandestine manner and exporting them for sale to the French Islands." About the same time the Calcutta Gazetteer of September 1789 confirmed that the French authorities in India co-operated with the British in suppressing the trade in human beings. 20

The exportation of plantation labour from India to the French and British colonies during the nineteenth century was the next phase of this ignoble trade. The study of migration of plantation labour in the XIX century should be of interest as the ports of Pondicherry and Karaikal served as important outlets of plantation labour to African and Asian colonies of not only France but also of Great Britain. The extent of emigration from this Territory was large enough to fall within the scope of our present study.

It is known for certain that the years 1851-59, 1860-63, 1870-76 and 1882 witnessed large-scale emigration of not only natives of French India, but also a considerable number of natives of British India to the colonies.

The order dated 17 June 1859 permitted the emigration of workers from Pondicherry and Karaikal to Reunion.²¹ There was large-scale emigration to Reunion between 1849-1854 under private auspices. In 1855 Antilles and Guyanne started attracting plantation workers. During these years, plantation workers were recruited only from the establishments of Pondicherry, Karaikal and Yanam.

Data of emigrants are available from scattered sources. For instance, Garstin's Manual of South Arcot furnishes the following details of both emigrants and immigrants between 1872-77:²²

<i>To or from</i>	1872-73		1873-74		1874-75		1875-76		1876-77	
	Emi-grants	Immi-grants	Emi-grants	Immi-grants	Emi-grants	Immi-grants	Emi-grants	Immi-grants	Emi-grants	Immi-grants
Guyanne ..	187	—	193	197	369	—	165	225	922	—
Guadeloupe ..	207	—	261	—	—	—	—	—	282	—
Martinique ..	157	—	300	554	678	—	154	559	—	—
Reunion ..	110	446	506	557	648	344	529	352	751	115
Total ..	661	446	1,260	1,308	1,695	344	848	1,136	1,955	115

While the total number of emigrants in five years was as many as 6,419, the total number of immigrants was only 3,349 resulting in an overall decrease of population by 3,070 in five years.

Julien Vinson attests to the fact that as many as 22,004 workers (Coulies) were sent to the colonies in Africa between 1869-1878 alone from the ports of French India. 23

This kind of exportation of manual labour was carried on from 1852 to 1898, almost regularly. The abolition of the post of Controller of Emigration in Pondicherry and Karaikal on 10 February 1898 marked the end of large-scale emigration. With the advent of the Twentieth Century the international character of emigration diminished in importance.

In recent years, an opposite trend is in evidence in that people from the neighbouring states are found migrating to this Territory. According to the 1961 census, 77.1 per cent. of the population are natives of the Territory. Migration within the Territory i.e., from one region to another is limited to 0.6 per cent. As much as 21.4 per cent. of the population have migrated to the Territory from other states in India. There were 1,761 persons forming 0.7 per cent. of the population born in countries outside India. Interestingly, 1,220 were born in Vietnam, 635 in Singapore, Malaysia and the British Borneo, 233 in Burma, 169 in France and 147 in Sri Lanka. The others were born in other countries in Europe, Asia, South and North America and Oceania.

Given below is a statement of the number of emigrants and their percentage of the total population as reckoned during the 1961 census :

<i>Description</i>	<i>Pondicherry</i>	<i>Karaikal</i>	<i>Mahe</i>	<i>Yanam</i>	<i>Territory</i>
Born within the region of enumeration	2,04,544 79.1%	60,810 72.3%	14,511 74.5%	4,461 62.8%	2,84,286 77.1%
Born in the other regions of the Territory	1,169 0.4%	998 1.2%	58 0.3%	21 0.3%	2,246 0.6%
Born in other States of India	50,155 19.4%	21,465 25.6%	4,805 24.6%	2,563 36.5%	78,988 21.4%
Born in countries outside India	19,781 0.8%	666 0.8%	102 0.5%	22 0.3%	2,768 0.7%
Birth place unclassifiable	715 0.3%	62 0.1%	9 0.1%	5 0.1%	791 0.2%

The percentage of persons born within the region of enumeration varies from 62.8 per cent. in Yanam to 79.1 per cent. in Pondicherry. The percentage of immigrants from other states in India varies from 30.5 per cent in Yanam region to 19.4 per cent. in Pondicherry region. In Karaikal it is 25.5 per cent. Pondicherry and Karaikal regions show 0.8 per cent. of their total population as persons born outside India. This is because of the close connections of Pondicherry and Karaikal with other French and British colonies and mainland France.

Migrants to the urban areas from within the Territory, both from the district of enumeration and other districts of the Territory, form only 6.7 per cent. of the urban population. Males form 6.8 per cent. and females 6.6 per cent. Not much of a disparity is observed between male and female migrants. Pondicherry (urban) has 8 per cent. which is the highest. The lowest is that of Yanam which is 3 per cent. Karaikal and Mahe hold the second and third position.

All areas except Karaikal have attracted more male immigrants. The immigrants in Mahe and Yanam are below the Territorial average both for males and females. Pondicherry region shows more immigrants in both sexes than the Territorial average, while in Karaikal females are more than the males. This may mean that in Karaikal more women move to the town by marriage from other parts of Thanjavur District. Pondicherry has a higher male population and it can be explained by the fact that males who go in search of employment do not bring in their family unless they are permanently settled. The second and the largest contributor to the immigrants in urban areas are the other states in India. In all 27 per cent. of the urban population are immigrants from other states. Yanam has the highest percentage of 34.4 per cent. while Karaikal has the lowest with 24.2 per cent. 24

II. Language

The Territory has a very interesting language composition. This is primarily due to the scattered location of the regions in three different linguistic areas—Yanam surrounded by Andhra Pradesh where Telugu is the dominant language, Mahe surrounded by Kerala where Malayalam is dominant, Pondicherry and Karaikal being surrounded by Tamil Nadu where the dominant language is Tamil.

The fact that several other languages are spoken in the areas which comprise the Union Territory today has another historical explanation. The south of India witnessed waves of immigrants of various races, castes and communities from the north at different periods. Members of such castes as Reddiars, Cavarais etc., migrated from the Telugu country during the Vijayanagar days. Members of such communities as Seniers, who migrated from Karnataka speak Kannada. Because of Pondicherry's long and close relations with Chandernagore and the existence of Sri Aurobindo Ashram, a good number of Bengalis have settled down in Pondicherry town. The close association of Pondicherry with the Mahratta and Muslim rulers since XVII century introduced Urdu and Marathi into the Territory. Marathi speaking families especially engaged in cloth weaving came to settle in the Territory in the heyday of Pondicherry's textile exports.

The Malaye, Burmese and Vietnamese languages also find speakers in the Territory because of the Territory's migratory contacts with Malaya, Burma and Indo-China. Contacts with France and British India have been instrumental in some people adopting those languages as their mother-tongue.

Tamil was perhaps the oldest language of the people in areas around Pondicherry and Karaikal. The Brahmi inscriptions found on some of the pottery sherds discovered at Arikamedu near Ariyankuppam is said to be one of the earliest forms of Tamil script that flourished in this part of the country. The temple inscriptions in and around Pondicherry are in Sanskrit, Grantha and Tamil. The earliest of them is in Sanskrit. The inscriptions of subsequent periods are mostly in Grantha, being an admixture of Tamil and Sanskrit. Later inscriptions are all in Tamil. Some inscriptions in Villianur temple are in Telugu which assumed some importance during the Vijayanagar days.

That Pondicherry saw the confluence of a cross-section of language groups for more than two centuries is confirmed by the Diary of Anandarangapillai. It is of some interest that he chose Tamil to write his famous diary wherein he frequently quotes Valluvar's precepts. Administrative correspondence during his time was carried on in French. Correspondence with the Kingdom of Travancore was, however, maintained in Tamil. But whenever necessary, translations in Persian and Telugu were also made available.²⁵ For example, a letter to the Commandant of Sendamangalam Fort was written in Telugu.²⁶ A musical performance held in the house of Anandarangapillai in the year 1746 was rendered in Telugu.²⁷ There were also Gujarati and Armenian businessmen in the town in those days.

An interesting feature of the 1961 census was that as many as fifty-five Indian and foreign languages were returned as the mother-tongue of the people of this small Territory. Apart from all the fifteen languages recognised by the Indian Constitution, languages such as Bhojpuri, Coorgi, Gorkhali, Konkani, Marwari, Parsi, Nepali and European languages such as French, Portuguese, Irish, Polish, Flemish and German have also been returned as the mother-tongue of the population. In recent years, Sri Aurobindo Ashram and its affiliated institutions have attracted people not only from various parts of India but also from foreign countries, thus widening the language spectrum of the Territory.

Language composition of the population:

The major languages spoken in the Territory are Tamil, Malayalam and Telugu. Tamil is the predominant language in Pondicherry and Karaikal regions. Malayalam is predominant in Mahe region and Telugu in Yanam region. This is in accordance with their geographical location. The Telugu spoken nowadays in Pondicherry is a mixture of Tamil and Telugu. The other major languages spoken are Urdu, French, Kannada, Hindi, Gujarati, English and Marathi. The table below shows the language composition in the Territory per 10,000 of the population (1961 census) :

Language	No. per 10,000 of the population	Language	No. per 10,000 of the population
<i>South Indian Languages.</i>		<i>North Indian Languages.</i>	
1. Tamil	8,829	1. Urdu	70
2. Telugu	440	2. Bengali	14
3. Malayalam	561	3. Hindi	12
4. Kannada	12	4. Gujarati	10
5. Sourashtra	2	5. Marathi	6
6. Konkani	1	6. Hindustani	1
7. Korava	1	7. Nepali	1
8. Tulu	1	8. Punjabi	1
		9. Sindhi	1
		10. Sanskrit	1
		11. Marwari	1
		Languages of other Asian countries.	3
		Languages of other countries	32

At the state level 88.29 per cent. of the population returned Tamil, 4.40 per cent. Telugu and 5.61 per cent. Malayalam as their mother-tongue. Among the other Indian languages, Urdu was returned by 0.70 per cent. of the population as their mother-tongue. Bengali, Hindi, Kannada, Gujarati and Marathi have been returned by 0.14, 0.12, 0.12, 0.10 and 0.06 per cent. respectively of the total population. The rest of the Indian languages spoken as mother-tongue account for 0.10 per cent. of the total population. Languages of other Asian countries account for the mother-tongue of 0.03 per cent. of the population. Annamese, Malaye and Vietnamese contribute 0.01 per cent each. Mother-tongue languages of other continents have recorded 0.32 per cent. French contributing 0.26 per cent. and English 0.06 per cent.

Languages in the four regions :

The table below presents the distribution of 1000 population by major mother-tongues in the four regions of the Territory :

Sl. No.	Name of language	Pondicherry	Karaikal	Mahe	Yanam
1.	Tamil	941	982	3	4
2.	Telugu	34	10	1	953
3.	Malayalam	..	4	3	995
4.	Urdu	..	9	1	N
5.	Bengali	..	2	N	0
6.	Hindi	..	2	N	0
7.	Kannada	..	1	3	1
8.	Gujarati	..	1	0	0
9.	Marathi	..	1	1	0
10.	French	..	4	N	0
11.	English	..	1	0	N

N= Negligible.

Tamil, the Territory's predominant language, is significant in Pondicherry and Karaikal regions with 94 per cent. and 98 per cent. respectively of the total population speaking that language as mother-tongue. In Mahe and Yanam, Tamil records only 0.3 per cent. and 0.4 per cent. respectively. Telugu which has recorded a percentage of 4.4 in the Territory shows a high proportion in Yanam region. Pondicherry and Karaikal regions show 3.4 per cent. and 1.0 per cent. of the total population against this language. It is as low as 0.1 per cent. in Mahe region. Malayalam which shows 5.6 per cent. at the Territorial level rises to a huge proportion of 99.5 per cent. in Mahe region. Pondicherry and Karaikal regions have recorded only 0.4 and 0.3 per cent. against this mother-tongue respectively. The percentage is very low in Yanam region (0.1 per cent.).

Among the other Indian languages, Urdu has a considerable proportion with 0.7 per cent. of the total population returning it as mother-tongue at the Territorial level. The percentage ranges from 4.0 per cent. in Yanam to 0.1 per cent. in Karaikal. Urdu is mainly spoken by Muslims of the former Hyderabad areas and Upper India. Presumably, Yanam has Muslims settled there migrating from Hyderabad and North India and ex-Hyderabad territory for purposes of trade and commerce. Even though Muslims are in good number in Mahe and Karaikal regions, they do not generally belong to the stock who speak Urdu or Persian. They belong to an indigenous stock and have Malayalam in Mahe and Tamil in Karaikal as their mother-tongue. Bengali has recorded 0.2 per cent. in the Territory concentrated almost entirely in Pondicherry region. This language has not been returned in Mahe while the percentage is negligible in Karaikal. Yanam shows 0.1 per cent. under this language. It is natural to find Bengalis in Pondicherry area. The Ashram founded by Sri Aurobindo in Pondicherry town has a number of Bengalis. Hindi speakers constitute 0.1 per cent. in the Territory and 0.2 in Pondicherry region. The speakers of this language as mother-tongue are totally absent in Mahe and are found in negligible proportion in Yanam and Karaikal regions. Karaikal records 0.3 per cent. for Kannada, while in Pondicherry and Mahe, it is 0.1 each, the percentage being the same as that of the Territory. Gujarati is spoken only in Pondicherry region. The percentage of Marathi speaking people form 0.1 per cent. at the Territorial level. French, the state language during the French regime, has shown 0.3 per cent. at the Territorial level and 0.4 per cent. in Pondicherry region. Yanam and Karaikal regions have shown negligible figures while Mahe has no return

for this mother-tongue. Pondicherry region having Pondicherry town as its headquarters, had naturally more administrative offices where French was used for public purposes. The percentage of English mother-tongue speakers is 0.1 per cent. in Pondicherry region and in the Territory. It is absent in Karaikal and it is almost negligible in Mahe and Yanam regions.

Bilingualism in the Territory :

The population knowing languages other than their mother-tongue is dependent on the major mother-tongue in the locality and the language used for official purposes.

In all about 35,606 i.e., 9.65 per cent. of the population in the Territory know some other language or languages besides their own mother-tongue. Of them 23,779 are males and 11,827 females. The percentage of the bilingual population in Pondicherry region is 10.48. Mahe region records the highest percentage of 11.94. For Karaikal region it is 6.54. Yanam records 9.95.

Among those with Tamil as their mother-tongue, English, French and Telugu are the three important subsidiary languages known. Among Malayalam speakers, English is the chief subsidiary language spoken (10.14 per cent.). French and Tamil are known to 2.36 per cent. and 2.32 per cent. of the Tamil speakers. Tamil, English and French are, in decreasing proportion, the three major subsidiary languages known to those whose mother-tongue is Telugu in the Territory. A good number of people whose mother-tongue is Urdu is said to know any one of the three subsidiary languages of Tamil, Telugu or English. Among French speakers, Tamil, English and Annamese are the three important subsidiary languages spoken. In the case of Bengali speakers, English and French are the two important subsidiary languages spoken. A small percentage speak Tamil or Hindi besides their mother-tongue. English is the most commonly spoken subsidiary language among those whose mother-tongue is Hindi. Tamil and French follow second and third. Among speakers of Kannada, nearly 80.73 per cent. know one subsidiary language or other with Tamil taking the first position, English and French taking the second and third positions. Gujarati speakers in the Territory are concentrated in Pondicherry region. In all 65.61 per cent. of the Gujarati speakers know one or other subsidiary languages, viz. 51.06 per cent. know English, 8.20 per cent. know Hindi and 4.76 per cent. know French. Among those whose mother-tongue is English, Tamil, French and Hindi form in the same order the three major subsidiary languages spoken in the Territory. As for those whose mother-tongue is Marathi, the three major subsidiary languages known are Tamil, English and Hindi in the same order of importance.

III. Religion

Jainism and Buddhism :

The advent of Jainism in the Tamil country is ascribed to the pre-Christian era and of Buddhism to the pre-Sangam era. It is then quite likely that even before Pallava sway extended over South India, Jainism and Buddhism had well established themselves in these parts. The discovery of granite sculptures of Buddha from both Pondicherry and Karaikal seems to confirm the above assumption. The sculpture of Buddha identified by Le Gentil near Virampattinam in 1769 stands even today as a silent reminder of a forgotten age. Another granite image of Buddha unearthed in 1966 near Tirunallar in Karaikal region confirms the existence of Buddhism in that region. 28 Names of villages like Puttakudi and Puthamangalam in Karaikal region and Sattamangalam in Pondicherry region seem to indicate that these villages might have once been inhabited by Buddhists.

Jainism enjoyed royal patronage and political influence in the court of Mahendravarman, the Pallava King, although there were people of different religious sects like Saivas and Vaishnavas in his kingdom. In fact during Mahendravarman's period Saivas and their leader Appar were subjected to persecution. The Saivas were in turn antagonistic towards the Buddhists and Jains as evidenced by *Tevaram* and so also the Vaishnavas as proved by the condemnation of the Jains, contained in the *Nalayiraprabandham*. With the spread of the Bakthi movement in the VII and VIII centuries, the influence of Buddhism and Jainism was on the decline. The rise of Vaishnavism was also witnessed during the period of Pallava Malla. Tondaradippodi and Tirumangai, the two contemporaries of Pallava Malla spared no effort to put down the influence of Buddhism. Even long before the French arrived here, Jainism and Buddhism had altogether disappeared from Pondicherry.

Hinduism :

Hinduism is not only the oldest surviving religion in all the four regions but also the one claiming the largest adherents. It was at its pinnacle during the Pallava, Chola and Vijayanagar days. The numerous temples that sprang up in towns and villages, the generous endowments made in favour of temples and mutts, the vast areas earmarked as Chaturvedimangalams and the privileges granted to its inhabitants are enough to prove the glorious period of Hinduism. In fact all the temples in South India, with trivial

exceptions, belong to the period of Chola and Vijayanagar rulers. The vaishnava temples were mostly built by the Vijayanagar rulers who were votaries of Vishnu. But with the arrival of the French, Hinduism had to face the onslaught of foreign missionaries. The concern of the native rulers for the preservation of Hindu religious institutions will be evident from the conditions laid down by them when they ceded the territory to the Europeans. The grant by which the Mahratta ruler ceded Karaikal and some adjoining villages carried this stipulation : "With regard to the pagodas in Karaikal and the villages aforesaid, you are to pay their allowances according to Salabad custom and take care that their worship and the celebration of the feast of Radotsavam may be performed with due respect; and you are likewise to continue the duties appropriated for their use, according to the usual customs. You are not to convert the Brahmins' houses into those of the Pandaravadai or the Soudra caste. As there are several tanks in the Pagodas and at the Brahmins' houses you must not suffer the Europeans to go into them." 29

In 1714, however, the French Jesuits succeeded in persuading Governor Dulivier to prohibit Hindus celebrating any of their feasts on Sundays. In a spontaneous reaction the Hindus decided to leave the town for good, compelling the French authorities to revoke the order. The **Conseil Supérieur**, however, decided to respect the local customs and ceremonies of the Hindus and advised the missionaries to be more prudent in their dealings with the local population. Since then, Hindus were at liberty to follow their religion although over zealous missionaries tried to interfere in their religious affairs from time to time.

Hindus form the largest religious community in the Territory. In all, 84.32 per cent. of the Territory's population (1961 census) belong to the Hindu religion. The percentage of Hindus varies from region to region i.e., 94.74 per cent. in Yanam, 87.70 per cent. in Pondicherry, 75.37 per cent. in Karaikal and 74.31 per cent. in Mahe. Yanam records the highest and Mahe the lowest. At the Territorial level Hindus account for 89.57 per cent. in the rural areas. Region-wise, Pondicherry has the highest percentage of Hindus in the rural sector with 92.23 per cent. and Mahe has the lowest percentage with 77.29 per cent. In urban areas Hindus constitute 67.83 per cent. of the total population. This varies from 94.74 per cent. in Yanam to 54.38 per cent. in Karaikal region. This difference between the rural and urban percentages indicates the cosmopolitan nature of the urban population, persons belonging to different religious communities living together as contrasted with a single religious community predominating the rural areas. 30

As part of the population census in 1961, data relating to Hindu temples in the Territory were collected. The following table gives the commune-wise break-up figures of temples in Pondicherry region under government and private control :

Sl. No.	Commune	Temples under		
		Government	Private control	Total
1.	Pondicherry	25	7	32
2.	Ariyankuppam	26	15	41
3.	Mudaliyarpettai	27	6	33
4.	Ozhukarai	41	3	44
5.	Villiyannur	57	9	66
6.	Mannadipattu	34	4	38
7.	Bahur	46	28	74
8.	Nettappakkam	36	1	37
Total		292	73	365

In all, 20 temples in Pondicherry are dedicated to Lord Siva and His Consort, 22 to Lord Vishnu and His Consort, 13 to Lord Murugan, 75 to Ganesh. As many as 184 temples are dedicated to village goddesses and 51 to other deities. Vaishnavite shrines are predominant in Pondicherry region.

There are in all 99 temples in Karaikal region, 91 under government control and the remaining eight under private management. Commune-wise break-up of temples in the region is given below :

Sl. No.	Commune	Temples under		Total
		Government	Private control	
1.	Karaikal	13	2	15
2.	Kottuchcheri	10	3	13
3.	Tirumalarajanpattinam	11	1	12
4.	Niravi	27	1	28
5.	Nedungadu	13	—	13
6.	Tirunallar	17	1	18
Total		91	8	99

In Karaikal region there are 30 Saivite shrines, 15 Vaishnavite temples, 33 Amman shrines, eight Ganesh temples and 13 dedicated to other deities. Saivite temples outnumber Vaishnavite shrines in the region. It is, however, to be noted that there is not even a single temple dedicated to Lord Murugan in Karaikal.

Since the Pallava days temples equipped with lavish endowments played an important part in the economic life of the village. They maintained a number of people who were employed as its servants and who were known by the collective name of *Kovilparivaram*.

During the Chola days, large temples were regularly managed by officials who also attended the meetings of the village assembly where the affairs of the temple came up for consideration. Important matters were sometimes taken up to the king for decision.

A tax known as '*magamai*' was collected for the temples and *chatrams*. *Magamai* in some cases included a definite percentage of the profits of commercial transactions, the purpose of the payment being the same i.e., charitable endowments to temples or *chatrams*.

The administration of temples prior to the arrival of the French was primarily the responsibility of the communities attached to the temple, although in disputes the ruler had the final say. With the arrival of the French, the Governors assumed the role of judges and law-makers in all matters of caste. They held this power as per *mamul* (tradition). In exercise of these powers, the Governors interfered in the affairs of temples and mosques. However, this kind of interference was not looked upon with favour. In fact the ministerial despatch of 23 November 1854 specifically called upon the Administration to abrogate all orders which might be considered as direct intervention in the affairs of temples and mosques. Instead, in compliance with the instructions contained in the above despatch, autonomous committees were formed to manage the affairs of pagodas.

The year 1892 was another milestone in the history of temple administration. The discretionary power hitherto exercised by the Administrator to appoint members of the board was withdrawn and in lieu they were elected by the devotees of the temple. The *arrêté* of 16 September 1892, while prescribing the mode of elections of trustees, guaranteed the right of the board to manage the properties of the temple. The mode of management was, however, spelt out in the year 1911.

The regulations were again reconsidered as a whole and a self-contained and comprehensive law was passed in the year 1918 (*arrêté* of 29 June 1918).

Article 8 of this *arrêté* placed all temples in the Territory under three categories :

- i) Temples enjoying grants from the administration;
- ii) Temples not receiving any grant from the administration but having movable or immovable properties worth more than Rs. 1,000 or an annual revenue of over Rs. 150;
- iii) Temples other than those falling under the above two categories.

The public institutions of worship falling under the first two categories were managed and run by Boards of Trustees composed of five members. Members of the Board may be dismissed, replaced or suspended in the interests of devotees or to ensure the good management of temples. The Governor was also empowered to split up into two or more managements, the management of many temples run by a single Board or bring under a single Board all the temples run by two or more Boards.

Temples falling under the third category received a different treatment. They were left under the management of donors or their legatees, their heirs or any other person appointed by them. The Governor intervened to appoint a manager only as a last resort when there was misunderstanding among the devotees or in the absence of any explicit appointment. Temples of the third category may be placed under the control of the Board of Trustees of the nearest temple or of the temple having common interests under certain circumstances.

Boards were empowered to ensure the regular celebration of religious ceremonies, draw the budget and accounts and do everything to ensure the normal performance of worship. The Boards of the first category may also raise loans with the permission of the Governor. The *arrêté* provided for complaints against maladministration.

Further the *arrêté* prohibited members of the legal profession from interfering in matters of caste and religion. Similarly, public servants were forbidden from playing any part in the administration of properties or in the functioning of religious institutions.

It may be of some interest to note that Sri Thirukameshwarar temple of Villiyannur and Sri Dharbaranyeswarar temple of Tirunallar enjoyed a special status in that they were governed by two different *arrêtés* of 11 May 1929. The Board of Trustees of the former always included the Madathipathi of Villiyannur Mutt as its member whereas the Tambiran of Dharmapuram Adhinam was chosen as the Chairman of the Board of Trustees of Tirunallar temple.

Hindus in the Territory fall under two main sects known as Saivites who worship Siva in all His myriad conceptual forms and Vaishnavites who accept Thirumal as the godhead and worship His different incarnations. Among Vaishnavites there are two sects known as Thenkalai and Vadakalai, the chief dividing line being that the Thenkalai Vaishnavites attach more importance to Tamil while Vadakalai Vaishnavites attach greater importance to Sanskrit. Saivite temples engage saivite *gurukkals* to perform the priestly functions. In the bigger Saivite temples after the recitation of Vedas in Sanskrit by the *gurukkals*, Thevaram in Tamil is sung by *pandarams* who are otherwise called *othuvars*. Vaishnavite temples employ *bhattacharias* for performing *poojas* in the temples. The *bhattacharias* recite the Vedas in Sanskrit and Thiruvaimozhi in Tamil. In a majority of Saivite, Vaishnavite and Murugan temples, the priests belong to the Brahmin community. There are a good number of shrines where priests of other communities offer *poojas*. Before they are permitted to enter the sanctum sanctorum they are to be duly initiated according to the rules of Agamas and Pancharatras.

They generally receive very little remuneration for performing the functions of a priest. However, they accept the money offered by devotees for special *arathanas*. What is peculiar to Pondicherry is that while Saivites offer prayers in Vaishnavite temples with a more cosmopolitan outlook, Vaishnavites resort to only Vaishnavite temples. Both in Karaikal and Mahe there are adherents of Vira Saivism which is a sub-sect of Saivism. The Sembadavars of Virampattinam are Saivites and Pitchaivarathan is their deity. Members of the Vannia community have a great regard for Goddess Drowpathi and take a prominent part in Drowpathiamman festival,

Some of the important temples own cars (*rathams*) as well as palanquins, and *vahanas* of peacock, *rishabam*, elephants, horses etc. The *vahanas* are generally made of wood or brass. The bigger and more famous temples own gold or silver plated *vahanas*.

Temples like those in Bahur, Madagadippattu, Tiruvandarkovil, Tirubhuvanai and Villiyanur in Pondicherry region and those at Agara Settur, Nedungadu, Tirunallar and Kasakkudi in Karaikal region are several centuries old and are living monuments of a glorious past. The temples of Sengazhuncerammam at Periya Virampattinam, Kokilambal Thirukameshwarar at Villiyanur, Karaikal Ammayar at Karaikal and Dharbaranyeswarar at Tirunallar are famous on account of the festivals celebrated. The fire-walking ceremony at the annual Drowpathiamman festival in Pondicherry, the annual Brahmothsavams of the Sengazhuncerammam temple and the Thirukameshwarar temple, the Sanipeyarchi festival at Tirunallar and Mangani festival at Karaikal attract large crowds even from outside the Territory. ³¹

Sengunda Mudaliars, Pattinavars, Sozhiavellalas, Isai Vellalas, Kammalars etc., are Saivites and mostly non-vegetarians. Cavarai Naidus, Yadavas etc. are mostly Vaishnavites and non-vegetarians. Among Vellalas, Reddiars, Vanouvas, there are Vaishnavites as well as Saivites. It is difficult to divide members of the Vannan community either as Saivites or Vaishnavites as they are worshippers of the lower order of deities. Some of them also have tutelary family deities. It is interesting to note that the cult of Murugan and Mariamman continue in some form in the French Antilles where it has merged with Caribbean secret ritual. The *Mariamman Thalattu* is sung with a French accent in Tamil in Guadeloupe even now. ³²

In Mahe too, Hindus generally belong either to the Vaishnavite or Saivite sect. There is also a mode of religious worship, though of a lower order, performed to appease the demons as a sort of protection against their destructive influence. Deities like Gulikan and Ghantakaran, Pampoori, Marpoliyan and Thalachuzian are known as Saivite deities. Members of the Pandokoolam tarwad offer worship to God Cherukkan and Goddess Paradevata who are considered as Saivite deities. Village deities like Kuttichathan, Uchchitta Bhagavathi and Chamundi are regarded as Vaishnavite deities. Members of the Pandokavu tarwad offer worship to Lord Ayyappan. The Sakthi cult is also popular among some Thiyya families. The *pooja* which is offered to Goddess Shakthi is known as *Sakthayam*. Ancestor worship in the form of Karnavar is also in vogue.

The shrines dedicated to these deities are numerous and are found mostly in interior villages. They bear no resemblance to the regular orthodox temples dedicated to divinities like Siva and Vishnu where Brahminical influence is predominant. Except in very few cases, these shrines are single-room structures without any architectural embellishments. These shrines are also bereft of idols inside. However, there will invariably be a brass oil vick lamp and the room will contain implements such as swords, tridents, wands and a crown.

The Sri Krishna Bajana Samithi and Sri Venugopalayam are also places of worship of recent origin. There are few images in these places where the religious ceremonies are less ritualistic and more attuned to modern trends.

In Yanam, there are Vaishnavites and Saivites among Hindus although a majority of them are Vaishnavites. The temples of Pillaraya and Sri Vishnu and Sivalayam are the three important places of worship for Saivites and Vaishnavites. Some of the people offer worship to village goddesses (*grama devatas*) like Mahalakshmiamma and Poleramma. The *theertham* festival is marked by a frenzied dance by male devotees to the accompaniment of drum music. The performance known as Jagarna will continue throughout the night.

Christianity :

In all about 9.20 per cent of the total population (1961 census) in the Territory are Christians of all denominations. Region-wise, they form 9.45 per cent of the population in Pondicherry, 10.75 per cent in Karaikal, 2.03 per cent in Mahe and 1.21 per cent in Yanam. In all, 71.97 per cent of the Christians are concentrated in Pondicherry region, 26.62 per cent in Karaikal region and 0.25 per cent in Yanam which is the lowest. At the Territorial level Christians constitute 6.49 per cent of the total rural population. In urban areas the total number of Christians works out to 17.73 per cent. Thus they form the second largest religious community in the urban areas of Pondicherry. Region-wise they form 22.72 per cent of the population in Pondicherry, 16.00 per cent in Karaikal, 4.69 per cent in Mahe and 1.21 per cent in Yanam.

Roman Catholics :

It has been pointed out that two letters of St. Francis Xavier written in the year 1545 reveal that the saint was in the vicinity of Pondicherry. It has also been suggested that the village 'Saveriacheri' must have been the scene of his evangelical work. 33 It is likely that the saint had made some conversions here, although

his converts might have lost their new religion as they had no priests to take care of them. But it was François Martin who, learning that there were French Capuchins in Madras, invited them to Pondicherry for the spiritual ministration of Europeans and converted natives.³⁴ The Capuchins who were in Madras since 1642 complied with his request and several of them came over to Pondicherry and started their mission.³⁵ In 1689, after the revolution which broke out in Siam, the Procurator of the Society of Foreign Missions in the Far-East came to reside in Pondicherry. The same year, some Jesuit missionaries expelled from Siam also landed at Pondicherry. The Jesuits headed by Father Guy Tachard decided to open a French mission with headquarters at Pondicherry which would take off where the Madura Mission ended and extend northward into the Telugu country. As it was to be run on the same principles as the Madura Mission, Fr. Jean de Britto was commissioned by the authorities in Rome to examine the soundness of the scheme as the Madura Mission could not look after the Christians who lived north of the Ponnaiyar. This paved the way for starting the Carnatic Mission.

The first chapel for the natives was built in 1686 and this was done at the initiative of the Capuchins. The chapel was situated outside the fort and dedicated to St. Peter. Later it came to be called St. Lazarus Church in honour of Tanappa Mudaliar who had donated the site. His christian name was Lazaro de Motha. Several other churches were built later on.

In 1691 the Jesuits obtained from the Government by virtue of their right as inhabitants of the town a piece of land now occupied by the Mission.³⁶ At that time the French colony was under the jurisdiction of the Bishop of San Thome, Mylapore. In 1695 by letters-patent granted and signed by Louis XIV, the Jesuits were authorised to establish missions in all the settlements and emporiums belonging to France in this country and were assured of help and protection.³⁷ While Capuchins came to look after the spiritual needs of Europeans and Creoles, the Jesuits were assigned the care of Indians. They built their first church in 1692 which was dedicated to **Immaculée de la Conception**. This was otherwise known as 'San Paul Kovil' because the Jesuits were then called Fathers of St. Paul or Paulists. Destroyed in 1693, it was rebuilt during 1728-1736.

Prior to 1700 there were not many Christians in Pondicherry. Fr. Tachard in one of his letters stated that the total population of Pondicherry in 1703 was around 30,000 out of whom about 2,000 were Christians.³⁸ Fr. Ducret

wrote to say that in 1725 there were 3,000 Christians. Between 1724 and 1725 over 600 persons were baptized and for the most part it was very difficult to convert them. A great many of the converts to Christianity were from the so-called low castes. Members of the high castes were not so much inclined to embrace Christianity because it preached the equality of men.³⁹ However, many Christians from other regions such as Coimbatore, Thanjavur etc., were attracted towards Pondicherry. The new converts contributed generously to erect new churches. Kanakaraya Mudali built a church at Ozhukarai at a cost of 700 pagodas. He constructed a monument in the cemetery at an expense of five to six hundred pagodas.⁴⁰

The French rulers gave considerable help to the clergy in their evangelisation work. Madame Dupleix gave all-out assistance to the missionaries. She went to the extent of donating a couple of villages near Marakkanam and Cheyur (which she had received from the Carnatic Nawab) to the Society of Jesus. Some of the Hindu temples were ordered to be closed down in 1714 and preference was given to the local Christians in matters of employment. It was even stated by the French trading company that it was 'a dishonour to their religion to prefer Hindus to Christians.'⁴¹

In 1739 when the Raja of Thanjavur sold Karaikal to the French, there was already a small congregation of Christians in the town. The Jesuits of Pondicherry were authorised to be in complete charge of both Europeans as well as Indian Christians in that region. According to Anandarangapillai, the Christians formed only a sixteenth of all the people in Pondicherry and almost all of them were poor. Writing in 1747, he states that only of late years a few Christians have been able to keep themselves in comfort as Europeans' dubashes or in other employments; they have been able to build themselves brick houses and to save fifty or a hundred or two hundred or three hundred rupees. The rest were all servants and coolies.⁴²

The second church built by the Jesuits during 1728-1736 was destroyed by the English after they seized Pondicherry in 1761. The Jesuits then erected a temporary chapel on the site of the Mission Press and began the construction of the present Cathedral in 1770 and completed it in 1791.⁴³ It was around 1775 that there was a talk of the *Société des Missions Etrangères* being given charge of the Carnatic Mission, also called *Mission de Malabar* and eventually replacing the Jesuits. In March 1776, consequent on the dissolution of the

Society of Jesus, the Carnatic Mission was by letters-patent of Louis XVI entrusted to the care of the **Société des Missions Etrangères**, Paris which, by the decision of the Holy See, was to take charge of all that part of South India previously under the care of the Jesuits. Mgr. Brigot (1776-1791) was appointed the first Bishop of Pondicherry and Superior of the Carnatic Mission by Rome. The territories entrusted to Mgr. Brigot extended from Machilipatnam in the north to Karaikal in the south and about 180 miles from east to west.

In 1776, M. de Saint-Estavan estimated the Christian population in the Carnatic Mission to be around 30,000 out of which Pondicherry alone accounted for about 10,000 and Karaikal about 2,000.⁴⁴ The Christians formed about one-sixteenth of the total population. In Pondicherry region, they were mostly concentrated in Ariyankuppam, Ozhukarai and Nellitoppu.

There was not a single Indian priest till then as the Jesuits had contended that natives were not fit for priesthood. Since 1777, it was decided to enrol natives in the seminary. However, Christians of high caste families were not prepared to send their children to the Virampattinam Seminary, where they may have to mix with Annamese and Chinese students whom they considered as outcastes. It was, therefore, decided to open a new Seminary for native Christians. In 1784 there were 14 inmates in the Seminary. The Carmel convent had 30 nuns. The congregation of nuns founded by Father Coeurdoux for members of the upper castes and another congregation founded by Father Ansaldo for members of the lower castes were then functioning in Pondicherry.

Mgr. Champenois (1786-1810) who took up the reins from Mgr. Brigot devoted himself most ardently to the formation of indigenous seminarists and to the establishment of the Indian clergy.⁴⁵ He built a seminary near the Cathedral in 1787 and founded a college to impart education to the children. On 20 June 1791 he dedicated the new church to the Immaculate Conception. The church was raised to the status of a cathedral in 1850. From the time of the French Revolution (1789) till the return of monarchy in France (1814), the mission could get neither missionaries nor money from France to carry on their work here. In 1809 Napoleon had ordered the dissolution of the **Société des Missions Etrangères***.

* The **Société** was re-established in 1815.

Mgr. Champenois was succeeded by Mgr. Hebert in 1810. During the period of Mgr. Hebert (1810–1836) the mission had to pass through a great deal of privation. The French missionaries were always suspected by the British and subjected to innumerable hardships. They could go beyond the limits of French territory only with a passport. It was only after the defeat of Tipu Sultan by the English that missionaries continued their work in Mysore, Coimbatore and Salem regions. Many of the missionaries died and there were no replacements from France.

After the restoration of the establishments to the French in 1816, the French missionaries once again renewed their activities. Between 1821 and 1836 as many as 23 missionaries came from France. Besides, eight Indians were ordained as priests. It was during this period that missionaries like Bonnard served in the Telugu country, Jarrige and Bigot-Beauclair in the Mysore country and Goust and Pacrean in the Coimbatore region. New churches and chapels were built. The number of converts increased.

In 1833, Mgr. Bonnard was consecrated as Co-adjutor Bishop. Three years later the Carnatic Mission was declared as the Vicariate Apostolic of the Coromandel Coast and Bonnard became its Vicar Apostolic (1836–1861). He invited the Jesuits and entrusted Tiruchchirapalli and Madurai regions to their care.

In 1840, he established the Mission Press and placed it under the care of Fr. Dupuis. In 1844, he authorised Fr. Dupuis to form the Congregation of the Immaculate Heart of Mary. The same year, the Carmelite sisters were brought under the Second Order. The Synod of the Vicariate Apostolic of the Coromandel Coast held at Pondicherry in 1844 was the most significant event during his episcopacy. This synod put forward several recommendations regarding the formation of native clergy, schools, seminaries, the administration of Christians, the Sacraments and the missionaries, conversion, etc. In 1845, the Vicariate Apostolic of the Coromandel Coast was divided into the three Vicariates of Pondicherry, Mysore and Coimbatore and entrusted to the priests of the *Société des Missions Etrangères*. The number of Christians was 80,000 in Pondicherry diocese, 14,000 in Mysore and 13,000 in Coimbatore. The Apostolic Vicariate of Vishakapatnam formed at the suggestion of Mgr. Bonnard was entrusted to the missionaries of the Congregation of St. Francis de Sales d'Annecy. The church of *Notre-Dame des Anges* was constructed in 1855 according to a plan drawn by the famous engineer Louis Guerre. Several other churches were constructed during the early half of the XIX century.

In 1858 the Pope nominated Mgr. Bonnard as **Visiteur Apostolique** of Indian Missions so as to study the working of Catholic Institutions and to submit a report to him. However, some three years later, Mgr. Bonnard breathed his last. He was succeeded by Mgr. Godelle who remained in office for only six years and was succeeded by Mgr. Laouenan (1868–1892). By 1873, the number of Catholics in Pondicherry Mission rose to 1,34,000 and reached 2,05,000 in 1886.

On 23 June 1887 a Concordat was signed between the Pope and the King of Portugal. As a result of this Concordat the Patronage of the Portuguese was reduced in India (Padroado) to their limits and the Pope was permitted to create in the rest of the peninsula such new dioceses as he deemed fit and convenient. As a further consequence, the Apostolic Prefecture of Pondicherry was abolished and the Pondicherry Vicariate Apostolic was raised to the status of an Archdiocese with jurisdiction over the dioceses of Mysore and Coimbatore.

The period of Mgr. Gandy (1892–1909) saw further growth of the Missions. Like his predecessors, he too paid special attention to the formation of the indigenous clergy. In 1899, the southern region of the diocese was carved out to form the Kumbakonam diocese. In 1909, i.e., during the period of Mgr. Morel (1909–1930) a portion of the diocese in North Arcot District with almost 35,000 Catholics was handed over to the Salesians. In 1930, another chunk of the diocese was taken away to form the Salem diocese. The same year, Mgr. Morel went on retirement due to ill-health. Mgr. Colas was consecrated as the next Archbishop. In 1948, he chose Mgr. Marc Gopu as his Co-adjutor who was subsequently made the Archbishop of Hyderabad. The number of Catholics in the diocese increased from 1,04,947 in 1930 to 1,58,925 in 1955.

On 1 September 1966, the boundary of Pondicherry-Cuddalore diocese was reorganised. The Madurantakam and Kanchipuram Taluks of Chengalpattu District were taken away and merged with Madras diocese. The parishes in Tiruvannamalai and Chengam Taluks of North Arcot District were attached to Vellore diocese.

On 28 November, 1955 Mgr. Colas decided to go on retirement. Mgr. Ambroise succeeded him the next year on 15 January. In February 1958, the Carmel Convent was shifted to Muttiyalupettai. On October 27, 1963 the **Société des Missions Etrangères** celebrated its Tricentenary. Following the decision

of Mgr. Ambroise to relinquish charge, Mgr. Selvanathar, the first Indian Bishop of Salem diocese was elevated to the rank of Archbishop on 15 June 1973 with responsibility to take care of the spiritual needs of 1,66,743 Catholics spread among 55 parishes.*

The Church of South India :

As early as in the fifties of the XVIII century, Protestant missionaries were at work at Panikkankuppam.⁴⁶ Although there is no specific reference to their denomination, it may be said that they were most likely the Danish Lutheran missionaries who founded the Mission of Tarangambadi in 1705. The Jesuits sought the help of Anandarangapillai to have the village rented out to them so as to prevent the Protestants from gradually spreading their religion there. Nothing is known about the subsequent fate of the community.

Around 1820 the Protestant community in Pondicherry consisted of a few French inhabitants, British officers and their family members. Since 1827 the chaplain at Cuddalore was called over on urgent occasions. But from 1829 to 1852 the chaplain came once a month. This arrangement was effected by the then chaplain Hallwell who was allowed to appoint a clerk in Pondicherry to keep him informed as to urgent calls such as baptisms, burials etc., and to take charge of the Protestant burial ground. Subsequently, the Special Agent, Cuddalore, raised the question of reimbursing the chaplain the expenses incurred by him and the usual palankeen allowance was sanctioned to him. He was, however, required to obtain the sanction of the French Government whenever he made any clerical visits to the station and to confine his duties to Protestants only. By 1842 the total number of members of the Congregation seems to have increased to about 60.

Permission was granted in 1844 for the construction of a Protestant church in Pondicherry. The church dedicated to St. John was built in 1846 with subscriptions raised in England and in this country.

In 1852 the visits were made quarterly but in 1854, at the instance of the Bishop of Madras, the monthly visit was reintroduced. The church was under the control of two private trustees until 1866 when it was transferred to the Bishop

* These include two quasi-parishes.

of Madras. The expenses connected with its upkeep were met by Consular Agents and from small offertories. In 1867, the cemetery was extended by levelling and enclosing the ground offered by the French Government.

The upkeep of the church depended upon private subscriptions but occasionally government aid was secured for specially important and large repairs, as for example, in 1918 after the great cyclone of 1916. For many years the affairs of the church were managed by the chaplain and two lay trustees but in 1924 in order that the life of the church might be fuller, a committee of six members was formed.⁴⁷

As a result of the Church Union Movement in South India which came to fruition in 1947, the Protestant community in Pondicherry also came under the mantle of the Church of South India.

With the increase in the number of Christians in Dhanwantarinagar, St. Lukes Chapel was built there to serve the needs of local Christians numbering about 150. They have organised a choir and a Youth League. Members of this Congregation evince some interest in the Ecumenical Movement.

The Seventh-Day Adventist Church

The origin of the Seventh-day Adventist Church in Pondicherry is traced to the year 1915 when one Devasagayam from Tiruchchirappalli is understood to have come here and organised the church. He also became its first Elder. Sometime around the year 1922, several families in Pondicherry joined the Congregation. The number of followers at present is placed around three hundred.

The church in rue Victor Simonel is understood to have been built sometime in 1945. The S.D.A. Church runs a high school at Pondicherry and a primary school at Dhanwantarinagar. On Saturdays they conduct bible classes or what is called the Sabbath School. Saturday is Sabbath day for them.

A branch of this Congregation was organised at Karaikal in the year 1961. There are no Seventh-Day Adventists in Mahe and Yanam.

The Ceylon Pentecostal Mission :

The Ceylon Pentecostal Mission which began its contact with Pondicherry in 1967 through its preachers in Villupuram found a footing here the very next year with a handful of followers. The number of believers has since increased to about hundred by 1976. A Faith Home is under construction at Satya Nagar near Pakkamudiyanpet. The Pondicherry Faith Home, which is affiliated to the Madras District Ceylon Pentecostal Mission, functions under the authority of the Chief Pastor at Adayar, Madras. The activities of the C.P.M. at Pondicherry are carried on by a Minister-in-charge who is assisted by a few male or female workers known as Brothers or Sisters. They also conduct a Sunday Bible School for children. The Mission has no adherents in the other regions.

The Truth Centre :

This Centre may be stated to have come into existence in Pondicherry with the arrival of Pastor Silvarius in 1958. With a handful of followers especially from Pondicherry and its suburbs, the Truth Centre (299, M.G. Road) is affiliated to the Apostolic Christian Assembly in Madras, a body registered under the Societies Registration Act in 1957. The Truth Centre in Pondicherry had established a branch in Cuddalore N. T. with a small following. The Centre organises conventions, open-air meetings, street preaching, hospital visits and home visits from time to time.

Christian Assemblies in India :

It started as the Brethren Movement at Plymouth, England, in the XIX century. There is no distinction between the laity and clergy among members of this Assembly and there are no ecclesiastical hierarchies. According to an account left behind by one Mlle Ligot, the message of Christian Assemblies was brought to Pondicherry by two English ladies around 1901-1902. Later, one Miss Porter worked here for many years. Even as early as in 1909, Mlle Ligot refers to the 'Bethel' (211, Bharathi Street) as their meeting place. 48 At present the followers number about one hundred. There is one Assembly in Karaikal with a handful of followers. The Pondicherry Assembly arranges conventions and open-air preachings from time to time.

Islam :

Even before the French landed at Pondicherry in 1674 there were Muslims in the area. Historians have pointed out that there were two mosques in the town.⁴⁹ As for Karaikal, Anandarangapillai in his Diary confirms the presence of Muslims (Sonakar) at Karaikal in 1738.⁵⁰ Nevertheless, it is most likely that they had settled there at least several centuries ago. Such places as Nagore, Nagappattinam and Tarangambadi not very far from Karaikal, have all been identified as places of settlement by seafaring Arabs who migrated from their native land in the early part of the VIII century. Even Nagur Andavar, the well-known muslim saint, is reported to have gone on samadhi for forty days at Vanjiyur, a place not far away from Karaikal.

The Europeans called everyone belonging to the muslim religion as Maures although this term is applied only to Mughals and Afghans and did not refer to Arabian seafarers who settled all along the Coromandal Coast and established marital alliances with local women. Those who live in the coastal area are known as Marakkayars while those in the interior are called Ravuthars. It was these Arab muslims who made generous contribution for the construction of a wall around Pondicherry during the period of Dumas. The influx of Mughals was a later development. The widow of Dost Ali Khan killed in the battle of 20 May 1740 sought asylum for a large number of contingents, cavaliers and many family members of the Nawab killed in battle.⁵¹ They were permitted to stay in Pondicherry. This was followed by an influx of refugees almost daily of whom a good number opted to stay in Pondicherry. Thus the southward expansion of Pondicherry town was prompted by the great influx of muslims in the XVIII century.

Most of the muslims in Pondicherry and Karaikal belong to the Sunni sect. A great majority of the muslims in Karaikal follow the Shafi school of ritual and dogma while those in Pondicherry follow the Hanafi school. The muslims in Mahe, like their counterparts in Malabar, are noted for their religious fervour. They belong to the Sunni sect and follow the Shafi school of ritual and dogma. There are very few muslim families in Yanam. Almost all of them are Sunnis and follow the Hanafi school of theology and ritual.

At the Territorial level, muslims form 6.36 per cent. of the total population. Out of the total muslim population, 49.31 per cent. live in Karaikal region, while 29.86 per cent live in Pondicherry region, 19.62 per cent. in Mahe region and

1.21 per cent. in Yanam region. Mahe region records the highest percentage of muslim population with 23.63 per cent. followed by Karaikal with 13.78 per cent. Pondicherry and Yanam regions record 2.71 per cent. and 4.04 per cent. respectively. In the rural sector, 3.9 per cent. of the population are muslims for the Territory as a whole. Their population is as high as 22.5 per cent. in Mahe. In Pondicherry region, only 1.62 per cent. of the rural population are muslims while in Karaikal they form as much as 8.08 per cent. In the urban areas 4.09 per cent. of the population are muslims at the Territorial level. Region-wise, Karaikal has the highest percentage of muslim population viz., 29.59 per cent. followed by Mahe with 25.28 per cent. In Pondicherry region, 7.07 per cent. of the urban population are muslims while they form only 4.04 per cent. in Yanam. Muslims are numerically stronger than Christians in Karaikal, Mahe and Yanam regions.

It is interesting to note that the cult of Nagur Mira, the muslim saint, whose sepulchre is at Nagore near Karaikal is said to be in vogue in an identifiable form in the French Antilles and has merged into Caribbean Syncretism.*

Depending upon exigencies, laws which were applicable to the administration of Hindu religious institutions came to be applied to mosques as well. In 1852 the Katif of Karaikal came up with a petition claiming the right to celebrate marriages like the Kazy among 'choulia' muslims and to maintain their marriage records. The Governor decided that the Katif of Karaikal should not exercise any of the functions performed by the Kazy unless he was permitted to do so by the Kazy himself by means of special delegation.⁵²

Again around 1861 a controversy arose in Karaikal over the powers of the Kazy and Mullahs. The Governor after consulting the Kazies and Mullahs of Calcutta Madrassa, issued a set of orders which spelled out the duties of the Kazy and Mullahs. This formed the subject matter of the *arrêté* of 11 November 1861 whereby the Kazy was recognised as a Muslim Magistrate with powers to decide disputes relating to civil and religious matters among muslims. As a civil functionary, he could solemnise marriages and tender advice to the court on complicated civil disputes among muslims. As part of his religious functions he recited prayers in the mosques, presided over all muslim festivals, etc. Mullahs recited prayers during funerals and attended to burial ceremonies. Unless specially authorised by the Kazy, the Mullah could not perform any of the functions of the former. ⁵³

* International Association of Tamil Research:

Proceedings of the Third International Conference Seminar, Paris 1970 (1973)
p. 222.

The provisions of the *arrêté* of 16 September 1892 on the mode of election of temple trustees were extended to the election of Kazies. ⁵⁴ In 1897 yet another controversy cropped up in Karaikal i.e., whether it was necessary to seek the assistance of the Kazy for marriage celebrations when the near relatives of the bride were there to attend to the functions. Interpreters of the Koran opined that the assistance of the Kazy was not necessary at marriage functions. Nevertheless, taking into account various other factors, the administration decided to appoint a special Kazy called Shiady Kazy for the sole purpose of solemnising marriages. He was to discharge his functions concurrently with the Kazy. ⁵⁵ Since 18 March 1938, he was allowed to perform the functions of Kazy, whenever the latter was either absent or held up otherwise. ⁵⁶ The mosques in Mahe are under the care of Musaliars who are assisted by Mullahs.

Although the *arrêtés* of 16 September 1892 and 9 April 1893 provided for forming committees to carry on the administration of mosques, they did not spell out the mode of management of temples and mosques. A necessity, therefore, arose to complete the process by framing supplementary rules, in as much as a number of temples and mosques were beneficiaries of tax-free government lands known as Devasthanam and the income was not always properly utilised for religious purposes. The *arrêté* of 27 April 1911 sought to achieve this object. This was subsequently modified by the *arrêté* of 29 June 1918 which was the last major step taken by the French to deal with all matters connected with the mosques. This *arrêté* continued to hold good even after merger.

Although the Kazi Act, 1880 was extended to this Territory on 24 May 1968, the provisions of this Act have not so far been brought into effect.

Precise and complete details of mosques and durghas in the Territory are not available. The following list was compiled based on enquiries and scattered references :

PONDICHERRY REGION

1. Mira palli, Yanam Venkatachalapillai Street, Pondicherry.
2. Kuthuba palli, Mullah Street, Pondicherry.
3. Muhammadia palli, 52, Mullah Street, Pondicherry.
4. Mohidine Andavar palli, Mullah Street, Pondicherry.
5. Ahamadia palli, Chanda Saheb Street, Pondicherry.

6. Masjid-E-Islamia palli, Grand Bazar, Pondicherry.
7. Muhammadu Poora pallivasal, Chinna Subrayapillai Street, Pondicherry.
8. Muhamadia palli, Sultanpettai.
9. Mosque, Katterikuppam.
10. Mosque, Vandrapet.
11. Mosque, Orlayanpet.
12. Mosque, Tirukkanur.
13. Mosque, Mannadipattu.
14. Mosque, Odiyambattu.
15. Mosque, Virampattinam.
16. Mosque, Murungappakkam.

KARAIKAL REGION

1. Meera palli, Karaikal.
2. Asra palli, Karaikal.
3. Dhayilla palli, Karaikal.
4. Theruvu palli, Karaikal.
5. Kidir palli, Karaikal.
6. Peria palli, Karaikal.
7. Mohideen palli, Karaikal.
8. Kapada palli, Karaikal.
9. Mohideen Andavar pallivasal, Ambagarattur.
10. Mohideen Andavar pillivasal, Niravi.
11. Mohideen Abdul Kadar Jeelani Andakai Masjid, Tirumalarajan-pattinam.
12. Mohideen Andavar pallivasal, Karkkangudi.
13. Pallivasal, Nallambal.

Durghas :

1. Masthan Sahib durgha, Karaikal.
2. Gul Muhamed durgha, Karaikal.
3. Saboor Sahib durgha, Karaikal.
4. Kanada Sahib durgha, Karaikal.
5. Mira palli durgha, Tirumalarajanpattinam.
6. Sheik Abdul Kader durgha, Tirumalarajanpattinam.
7. Oli Mohamed durgha, Tirumalarajanpattinam.
8. Kani Sahib durgha, Niravi.

MAHE REGION

1. Mangot Jamayath palli, Pallur.
2. Gramathy palli, Pallur.
3. Chokli palli, Pallur.
4. Poozhiyil Jamayath palli, Mahe.
5. Mohideen palli, Mahe.
6. Vayil palli, Jail Road, Mahe.
7. Puthiya Mohideen palli, Parakkal.
8. Jamayath palli, Manchakkal.
9. Mohideen palli, Chalakkara.
10. Jamayath palli, Pandakkal.

YANAM REGION

Masjid, Chinta Street, Yanam.

Other religions :

Buddhism, Jainism and Sikhism are the other religions which are represented in the Territory although the members of these three religions do not form a significant number. Buddhists are found only in Pondicherry, Mahe and Yanam. Jains and Sikhs are found only in Pondicherry urban area. Bahais are represented in Pondicherry and Karaikal.

Atheism :

In all about 320 have registered themselves as atheists who are mostly concentrated in Pondicherry (urban) and Karaikal (rural) regions. This may be due to the impact of the self-respect movement (Suya Mariathai Iyakkam) launched by the Dravida Kazhagam which propagates atheism.

IV. SOCIAL LIFE**Caste structure :**

Since time immemorial society in India was divided into four divisions known as Brahmanas, Kshatrias, Vaisyas and Sudras. The Kasakkudi plates reveal that the Pallava rulers in general enforced the Paripalita Sakala Varnasramavyavastha visesah, i.e., the special rules of castes and orders. Although it is not known how long and to what extent this four fold classification was adhered to in practice in the areas that now fall under this Territory, it may be assumed that the four fold division of society in accordance with the Hindu sastras continued to be respected even during the Chola days. "Each caste was more or less a hereditary occupational group with an active organisation for the regulation and protection of its economic and social interests." 57 Caste and group life formed no hindrance to social co-operation for common ends.

There were waves of immigrants of various races, castes and communities from the north. Many new castes found a place in the social strata of the Tamil districts including Pondicherry and Karaikal regions with the influx of Telugu and Kanarese people during the Vijayanagar days. Among them may be mentioned Reddiars, Cavarai Naidus, Balijs, Uppiliars (salt manufacturers), Senians (Telugu weavers), Telugu speaking Brahmins, etc.

The French having come here originally as traders did not interfere in matters of customs and practices. Even after they established themselves as the rulers of the land they allowed the natives to follow their own customs and practices so as to maintain good relations with them. These customs and practices were closely linked to the system of castism.

Many of the communities in the Vijayanagar empire were divided into two groups known as the Valangai and Idangai groups i.e., right-hand or left-hand castes. Julien Vinson points out that in the last decade of the XVII century, members of the right-hand castes were predominant in Pondicherry. But the French Company was particularly anxious to have more traders, mostly chettys who belonged to the left-hand sect. On 8 November 1690 François Martin obtained the consent of the members of the right-hand sect to allow chettys to build three streets to the north of the fort. They were also granted the right to hold their religious ceremonies without any let or hindrance. Very soon Pondicherry became the scene of strife between the left and right-hand castes. The Valangai and Idangai classes living in the town quarrelled among themselves for certain privileges like the use of savalakkali, white umbrella, white horse and the five *sembus*.⁵⁸ Speaking about the occasions when they quarrelled among themselves, Abbé Dubois remarks thus: "perhaps the sole cause of the contest is the right to wear slippers or to ride through the streets in a palanquin or on horseback during marriage festivals. Sometimes it is the privilege of being escorted on certain occasions by armed retainers, sometimes that of having a trumpet sounded in front of a procession, or of being accompanied by native musicians, at public ceremonies. Perhaps it is simply the particular kind of musical instrument suitable for such occasions, that is in dispute, or perhaps it may be the right of carrying flags of certain colours or of certain devices during these ceremonies."⁵⁹

These disputes caused a great deal of concern to the French. The settlement of caste disputes was, however, out of the scope of ordinary tribunals and fell within the jurisdiction of the Governor. During the Pongal festival in 1717 a major dispute arose among Hindus. Members of the left-hand castes took out a procession along the Madras road beyond the limits fixed by convention. People of the right-hand castes objected to the procession being taken into their area. A clash ensued in which one of the ears of a right-hand caste member was mutilated. The chief of the right-hand castes demanded by way of compensation the ear of one of the left-hand caste members. This

was followed by further tumult. This ultimately led to a meeting of the **Conseil Supérieur** which after a great deal of deliberation brought about a compromise in February 1717. The Governor ordered the arrest of the chiefs and threatened them with a heavy fine. This brought temporary peace. When new disputes arose, members of the left-hand castes were fined. It was not until 1730 the right-hand castes granted some more concessions to the left-hand castes in the town.

The year 1741 will go down as a significant landmark, for it was then that the **Conseil Supérieur** issued the following order under royal command : "Whereas it has been represented to us that the men of the right-hand caste object to Chettis and other sectarians of the left-hand caste entering the town by the Madras Street, either on horseback or in palanquins; and whereas they urge, on the ground of long-standing custom of the country, that this privilege should be reserved to them alone, we, the members of the Supreme Council of Pondicherry, hereby pronounce that the claim of the right-hand caste to the exclusive use of this road cannot be admitted. It is the emphatic declaration of His Majesty that this town shall be free to all its inhabitants, irrespective of caste or creed; that there shall be no bar or restriction in the case of any particular sect and that all shall be allowed unrestrained enjoyment of the street so long as the laws of the State are not infringed. The new Madras Street has been thrown open to the public as a highway, in order that the left-hand caste may share the benefit of it equally with the right-hand. We, therefore, give publicity to the order authorising the free passage of all traders and Chettis along the Valudavur or Madras roads, on horseback or in palanquins. Men of all castes, right-hand or left-hand, are hereby informed that they can, after entering the town-gates, repair to their respective streets by either of the roads running on the right or the left of the town-wall. Whoever, whether of the higher classes or not, contravenes this order shall be deemed guilty of disturbing the public peace and shall be liable to the penalty attaching to that offence. In order that no one may plead ignorance of the existence of this notice, copies of it will be pasted at all public places in the town. Issued by order of the Supreme Council, under date the 31 July 1741."60

In spite of this clear order there erupted another controversy the very next year. It centred on the right of the members of the left-hand caste to go on horseback in a palanquin along the prohibited streets. In 1767 there was yet another controversy regarding a small lane where there were 12 houses of the

left-hand caste and eight houses of the right-hand castes. The *arrêté* of 15 July 1768 once again upheld the principle of equality between these two groups but rivalry continued. In another incident, Vanniyas who were supposed to belong to the neutral group, sided with the right-hand castes. Law de Lauriston declared that Vanniyas shall have no say in the matter and restrained the Chettys within their bounds. 61

The *règlement* of 18 November 1769 issued by Law de Lauriston ordered that in all civil matters local customs and usages shall be followed. Naturally so, when Law de Lauriston reconstituted the sepoy companies in 1773 one 'fusiliers' company was so organised to consist entirely of pariah converts. This innovation by which Law emphasised the segregation of the out-castes was abolished by the Royal Ordinance of 20 January 1776. It made clear that soldiers shall be recruited from religious communities without any distinction based on caste and creed. While this august proclamation could be enforced among the soldiers caste consciousness reigned supreme in civilian life.

The plight of the socially depressed classes was almost deplorable. Until the abolition of slavery in 1792, a good number of them were bought, more often in a clandestine manner, and despatched to the French colonies in Africa. Even Dumas, one-time Governor of Pondicherry, carried the stigma of a slave trader. There were perhaps also people like Madame François Martin who in their generosity granted freedom to their slaves. She even left a small legacy in her will as a token of her love for her faithful slaves. 62

The French when they returned in 1816 were a changed lot carrying some of the sparks of the French Revolution. The order of the Governor dated 6 January 1819 extended the French Civil Code to the French establishments, without prejudice to local customs and usages. The order enjoined that Hindus shall be governed by the provisions of the French Civil Code only in matters when the provisions of this Code were not contrary to Hindu customs.*

* The modified Commercial Code was extended to Pondicherry subsequently by the law of 7 December 1850 and came into operation in 1851. The Code of Criminal Procedure was introduced in 1883.

The administration also recognised the right of each caste to have its own tribunal to deal with caste affairs. However, the Government retained the authority to review the decisions of such tribunals. Among the affairs of caste, some were simple and could be disposed of by **Juge de Paix** although an appeal could lie with the Governor. Disputes of a serious nature fell within the exclusive jurisdiction of the Governor.

That there were violent clashes again in January 1822 is confirmed by Julien Vinson. These clashes occurred as the administration had inadvertently accorded to an oil-monger the rights and privileges of the right-hand castes. These disputes often led to protracted litigation. Viewed against these events, the constitution of a Consultative Committee on Indian Jurisprudence by the local ordinance of 30 October 1827 turns out to be an important development. This Committee was constituted with a view to helping the government and the courts in deciding questions where a knowledge of local laws, usages and customs were necessary. A plethora of orders had to be issued either stipulating or determining the rights and privileges of one or other caste.

According to a report prepared by Bedier in 1824, the following right-hand, left-hand and neutral castes were identified in Pondicherry region : 63

Right-hand castes :

Ambattère	Nattouvère	Tassie
Caicolavère	Parias	Tondammandale Vellalère
Cavaré	Pattनावère	Toullouvère Vellalère
Comoutty	Sanapère	Vallouvère
Coravère	Sanare	Vaniaire
Cosavère	Sedaire	Vannare
Moutchière	Sembadavère	Villière
Moutrière	Senecodéare	Yadavère
Nattamanne	Sojière Vellalère	

Left-hand castes :

Caicolavères	Pallys	Tassies
Camalers	Sacquilis	Vaniers
Chettys		

Neutral castes :

Brames	Pandaroms	Rettys
Canacars	Patonoulkarers	Sattany
Edears	Rajas	Taders
Morattiers	Rajapouttres	Toudoucars
Pallys		

In a similar report prepared by Cordier in 1825 in respect of Karaikal region the following castes were identified: 64

Barbier (Navithar)	Couttady	Potier (Kusavar)
Berger (Idayar)	Etrangers	Raja
Blanchisseur (Vannar)	Macois	Retty
Brames	Maure	Salipen
Callère	Molacara	Sattani
Camalen	Mouchy	Sembadeva
Cammalere	Moudaly	Souraire
Cannadier	Naïnar	Taden
Carava (Corava)	Nattaman	Tisserand
Caréan	Nattouven	Vaïcheterouva
Cavare	Nockar	Vallouven
Chennen (Chenia)	Oudéan	Vania
Chetty	Pallen	Vellaja
Choulis	Pally	Viabary
Collar	Paréas	Viroudéan
Comoutty	Pattanava	

According to a census carried out at Karaikal in 1856, there were in all 42,474 Hindus, made up of 11,284 Vellalas, 1,888 Kavarais, 1,196 Yadavals, 188 Komutties, 710 Chetties, 1,824 Weavers, 1,900 Macouvas, 5,607 Pallis, 1,499 Kammalas, 296 Devadasies and temple musicians, 490 Ambattars, 448 Vannars, 1,552 Brahmins, and 9,056 Pariahs. 65

All these lists, however, do not provide an accurate picture of the caste structure in the regions. While in certain cases the caste names are given, in others the profession alone is indicated. Cannadier stands for the country of their origin. The word 'Etrangers' stands for foreigners.

The earliest attempt at improving the lot of the depressed classes centred mainly on the provision of educational facilities for them. On 21 July 1828 the first free school for members of the depressed classes was opened in Pondicherry. In 1843 the fathers of *Missions Etrangères* were given authorisation to construct a chapel on a plot of land belonging to them at Kuruchchikuppam on condition that members of the depressed classes of Kuruchchikuppam would be permitted to enter the chapel and offer prayers without, however, resorting to any processions or ceremonies outside its precincts.⁶⁶ In 1849 three more schools were opened, one for *Créoles*, another for Tamils (caste Hindus) and the third for Pariahs. Administrative efforts were also directed towards providing them better housing facilities. On 26 August 1872, twentyeight parcels of land (each measuring 13.72 m x 23.86 m) near the forest of Adivipolam (Farampeta in Yanam) were freely assigned to the so-called out-castes for the formation of a village.⁶⁷

Around 1870 A. Esquer made a more detailed study of the castes and sub-castes in all the four regions together with their religious affiliations, traditional profession, etc.

With the establishment of the Third Republic in France a new wind started blowing. There grew up a clamour among some enlightened Indians for equality with the French. The French came forward to bridge one of the gaps that separated the natives from French citizens, i.e., to enable them to be governed by French laws. The *décret* of 21 September 1881 promulgated by the *arrêté* of 3 January 1882 was almost a revolutionary development in that it authorised natives to renounce the native personal laws that governed them. This process was known as *renonciation* which once made was final and irrevocable and those who made this option came to be known as *renonçants*.

In 1893 some prominent Valangamougattars who became *renonçants* formed an association called *Société Progressiste de renonçants Valangamougattars* to work for the welfare of members of their community.* Prizes were awarded and

* The *Société* still continues to function in Pondicherry.

every encouragement was given to them so as to wipe out the educational backwardness of members of their community. ⁶⁸ Some Valangamougattars embraced Christianity in order to escape from the disabilities of castism. The education of such converts was taken care of by the missionaries. A large number of them left their villages and sought employment in and around the town. Chunnambukalavai-pet (Tiruvalluvarnagar), Kuruchchikuppam, Dupuypet and Savariarpet were some of the areas where they settled down. The missionaries built churches in all these areas and carried on their yeoman service. Some of them were absorbed in government service, especially in the lower ranks. Some sought employment in the textile mills. Some were employed by the missionaries themselves. Yet others took to military service under the French and went to serve in the colonies.

The years 1903-1912 may go down in history as the period of renewed agitation for equality in public premises like churches, theatres, etc. R.P. Babilonne was in the forefront of this agitation. Latour Sambrama, a veteran of World War I spearheaded the movement to pull down the walls that separated the cemetery among French citizens, caste and depressed class Christians.

Another association by name 'Réveil Social' was started in 1907 to work for the welfare of the depressed classes. Besides the Clairon brothers, Lazare, François Lesel, Horace and M. Noël and many other members of the community played a prominent role in the movement for the uplift of the community. 'Réveil Social' became another nerve centre fighting for social reforms. Schools for educating the young and the old were run by this organisation. The members often met and discussed the problems of their community. Teams of social workers went round the rural areas to study the conditions of the depressed classes and offered suggestions to improve their lot. Hard-working and intelligent youngsters were encouraged to prosecute higher studies and financial assistance was given to needy students. Attached to Réveil Social, was another organisation called 'La Jeunesse Républicaine' (The Young Republicans).* The betterment of the backward classes was the motto of this société. La Ligue du Relèvement Social was yet another organisation that fought for the rights of the depressed classes. 'Solidarité des dames de l'Inde Française', 'Gramapunarutharanam' were some of the other organisations which lent support

* Started in 1911, La Jeunesse Républicaine continued to function till 1955.

to the cause of the depressed classes. Several other associations were formed to work for the welfare of particular communities e.g. **Alliance éducative des Vannias** (1919), **Visvakarma sabai** (1923), **Yadavakula sangame** (1924), etc. Thus a good deal of discussions and debate was carried on in the first quarter of the present century. The educated among these communities worked unitedly to put an end to the stigma of untouchability.

In 1926 E. V. Ramasamy Naicker visited Muttiyalupettai along with Dr. Varadarajulu Naidu and addressed a gathering there. E.V. Ramasamy again visited Pondicherry in 1931 and addressed a meeting in Gaebelé Theatre. His radical ideas won him many followers in Pondicherry, notable among them being Poet Bharathi Dasan and M. Noël. In the 'Puduvai Murasu', a journal which served as a mouthpiece of the self-respect movement, Bharathi Dasan was a regular contributor. Through his poems he made a scathing attack on the caste system. Noël wrote a series of articles condemning the church and the priests for upholding caste distinctions in churches for which he was sued in the court of law. He was sentenced and fined in the lower court. The **Tribunal Supérieur d'Appel** in Pondicherry also confirmed the judgement of the lower court. But the Supreme Court in Paris set aside the judgement.

In November 1933 Gandhiji started his All-India tour to appeal to Hindus to make amends for their sins in having kept the Harijans under subjugation. In December 1933 a branch of the Tamil Nadu Harijana Seva Sangham was started in Pondicherry. Maurice Clairon, Ganapathy Sagar, D. Durairaj, J. Swaminathan and a few others, who took keen interest in removing the bane of untouchability, were members of the Executive Committee of the Pondicherry Harijana Seva Sangham. A similar sangham was also started in Karaikal with Arangasamy Naicker as its President.

Gandhiji visited Pondicherry on 17 February 1934 in the course of his tour of Tamil Nadu. The Harijana Seva Sangham carried on a campaign among the people and collected funds to present him a purse at the time of his visit to Pondicherry. Several thousand people gathered at Odiansalai maidan to see and hear the Mahatma. In a brief speech Gandhiji advised the audience to eschew castism and communalism and to remove the blot of untouchability from their midst. He paid glowing tributes to the noble ideals of equality and brotherhood enshrined in the French Constitution. While Gandhiji addressed the gathering from the dais, Georges Bourret, the then Governor of Pondicherry,

stood up in his car parked at the Police Station near Odiansalai and had a glimpse of the Mahatma from a distance. In deference to the advice of Gandhiji, members of the Harijana Seva Sangham dedicated themselves vigorously to the service of the Harijans. In 1936 the **Conseil Général** called upon the **Cercle de Pondichéry** to throw itself open to all without any distinction of colour.

In 1912 Sri Narayana Guru paid a visit to Mahe to spread the message of brotherhood of men. The first conference of Sri Narayana Dharma Paripalana Sangham, Mahe, was held the same year. Sri Narayana Guru visited Mahe a second time in 1928. Six years later, Mahatma Gandhi visited Mahe. All these events underline the penetration of reformist ideas into Mahe.

The Deena Poshaka Samajam in Yanam was started in 1931 with the main object of spreading education among the depressed classes.⁶⁹ Prominent members of the community in the region were associated with the activities of this Samajam. The names of Pamu Rama Murthy, Pantagada Birava Murthy, Dunna Venkata Ratnam, Kamidi Venkata Subbiah, Gurrappu Venkatarathnam, Dadala Ramanayya (Raphale) will be remembered. In the beginning the Samajam was housed in a mud building. But with the active co-operation of the members and a liberal grant made by the Administration, a pukka building was constructed and declared open on 25 October 1950. The Samajam conducted a free school for both boys and girls upto VI Standard and maintained a well-equipped library of books donated by well wishers.

All these developments and the radical ideas permeating through the length and breadth of India left their impact on the French Administration in India. In a report submitted to the President of the French Republic, the Minister for the Colonies and the Minister for Law recommended that mention of caste in the **Etat-Civil** records and **Notaire** deeds might be dispensed with in French India since the people in this colony were clamouring for the abolition of these age old conventions of caste system. It was suggested that only the proper name, family name, father's name and details of residence need be mentioned in the public records. This recommendation was accepted by the President and the **décret** of 16 June 1937 was promulgated by the **arrêté** of 15 July 1937.⁷⁰ This was the first and the foremost decision of the government headed by Governor

Croccichia that paved the way for further reforms designed to erase the stigma of castism in the Territory.* The local associations were also vociferous and brought to the notice of the government the various disabilities suffered by the low caste people.

In 1940 the 'Valangas' represented to the government that their villages were all known as 'cherry' and this nomenclature at once proclaimed their low status in society and degradation and appealed that the suffix 'cherry' to the village names should be changed into 'pet'. Hoping that this step would have a psychological effect, the government considered their representation favourably and ordered in their *arrêté* of 20 August 1940 that the expressions 'cherry', 'parachery', 'paraterou', 'pallachery' 'pallaterou', 'sakiliparaterou', 'vettiaparachery' and 'vettiaparaterou' inhabited only by the pariahs should henceforth be known as 'peth' throughout French India with the exception of Pondicherry, Kottuchcheri, Mel Kottuchcheri, Naivachcheri and Agara Naivachcheri. ⁷¹

As early as in 1947 a resolution was passed on the Thirteenth Anniversary of the Senji Salai Students' Association calling upon the government to change the name of Chunnambukalavaipet (in Pondicherry Commune) as Tiruvalluvar-nagar. By the *arrêté* of 10 December 1953 the government ordered that 'Chounamboucalavapeth' should thenceforth be known as 'Tirouvallouvarnagar' and 'Malapally' in Yanam Commune as 'Adi Andrapet'. Though these measures did not themselves alter very much the status of the depressed classes, they were symbolic of the new wind of change sweeping through the nation. But soon after merger, in one of the first steps, the administration extended the Untouchability (Offences) Act, 1955 to Pondicherry.

The first post-merger census carried out in 1961 did not attempt to collect details of castes in the Territory. However, the monographic studies carried out as part of the 1961 census identified the following castes in Pondicherry and Karaikal regions :

Ahamudaya Thevar	Pathar
Alwar	Pattinavar (Chettiar)
Brahmin (Iyer)	Reddiar
Chettiar	Sengunda Mudaliar

* It was in 1935 that the so called untouchables were 'scheduled' for special treatment under British Rule. Thus the term 'Scheduled Castes' became the official designation of untouchables.

Desigar	Sozhia Vellala Pillai
Gramani (Nadar)	Thondaimandala Mudaliar
Isai Vellala Pillai	Udayar
Kammala Asari	Valluvar
Kavarai Naidu	Vannar (Washermen)
Maruthuvar (Barber)	Vanniar (Padayachi-Kavoundar)
Navithar (Barber) (Pandithar)	Vellala Mudaliar
Parayan	Yadava Pillai

Besides those mentioned above, several other castes are represented in the Territory.

The village community is bound together economically on the basis of castes which follow their traditional occupations. The Vanniars or Pallis are also known as Padayachi, Nainar, Naicker or Kavoundar although a majority of them are known as Padayachis. By and large, Vannia Padayachis appear to be more prosperous than Naickers and Kavounders. They are mostly agriculturists and weavers. The Reddiars are a powerful community and are owners of extensive land holdings. The Kavarais from the Telugu country were mostly soldiers and traders of jewelry and precious stones. The Yadavals are shepherds and milkmen by profession. Chetties are mostly merchants, traders and bankers. There are two groups of Komutties viz., the southern sect and northern sect who are mostly traders. Elavaniyars were also merchants. Although Malayamans are cultivators in general, in Pondicherry they are mostly merchants. They add the caste suffix of Odayar to their names. Both the northern and southern group of Vanuvas are oilmongers and carry the suffix of Chetty to their names. The Sembadavars are apparently descendants of migrants from the neighbouring districts. The Sembadavars of Virampattinam have assumed the title of Nattar and are engaged in fishing in the nearby rivers and lakes.

There are two clans of Sengunda Mudaliars according to legend, one which complied with the request of Poet Ottakkoothar and another dissident group. Members of the dissident group are said to be found mostly in Thanjavur District as well as in Tirumalarajanpattinam and Karaikal. Those who complied with Ottakkoothar's request are said to be residing in Pondicherry. They are mostly weavers. Besides Kaikolars, such communities as Chedars, Seniers or Kannada Seniers, Saliers and Pattunoolkarars are also weavers by profession.

Isai Vellalas are none other than that section of Sengunda Mudaliars or Kaikolars who were associated with the system of devadasis. There are two clans among Isai Vellala Pillais, one known as Parikulam and the other as Kaikolar. It is said that members of the Parikulam assume the title of Pillai and Kaikolars the title of Mudaliars. The Isai Vellala Pillais of the Parikulam class were traditional temple musicians. Pari means horse and music is said to flow with the swiftness of a horse. Cattle rearing is the main occupation of Yadava Pillais. They take to agriculture as a subsidiary occupation. Desigars originally belonged to the Sozhia Vellala Pillai caste.

The caste of Kammalas included Thattars, Thatchars, Karumars, Kannars, Kalthatchars, Pathars, etc. They were mostly engaged in different kinds of smithcrafts. Asaris were goldsmiths by tradition and called themselves pathars. The Asaris were also engaged in blacksmithy and carpentry. The Mouchis were mostly painters, decorators and carpentry workers. The Shanars, divided into the southern and northern sect, were mostly toddy tappers. The Satanis were flower sellers and garland makers. Kosavars were professional potters. The Panichavars attended to duties connected with funerals. Pariahs were traditional agricultural labourers. The Navidars and Ambattars are barbers. Vannars who are washermen are divided into several endogamous sects on territorial basis. Valluvans were priests of pariahs. Vettians are custodians of the burial ground. They also regulate the flow of river water into the fields. The Maravars, though not many, were soldiers. The Sakkilis were mostly cobblers. Koravars formed a clan of wandering gypsies. The Otters were mostly engaged in digging wells, tanks, etc. They also tended the pigs.⁷² The spread of education, however, has been responsible for considerable occupational mobility these days.

The residential pattern in villages is very often based on the caste system. Houses are very often built in rows, on two sides of a street or lane. Settlements of the depressed classes are even now called 'pets'. It will be of some interest to recall that the *arrêté* of 5 November 1856 authorised members of the low caste Hindus of Karaikal to reside in the streets of the high castes on the ground that there was no established *mamul* (tradition) on this point.⁷³ Some of the villages which began as single caste villages grew up into multi-caste villages in due course in order to meet social requirements. Kadirkamam, for instance, grew up as a settlement of weavers. A few muslim families migrated to this village later. They were all engaged in 'Aachekattuthal', an important item of work for weaving. Still later some Pariah families migrated

from Tamil Nadu and settled down as agricultural labourers. Thus it had grown into a multi-caste village. Bahur, for instance, is a multi-caste village where there are Brahmins, Vanniars, Chettiars, Udayars, Gramanis, Vannars and Navithars besides some Christians and Muslims.

Caste panchayats were prevalent among certain castes until about two decades ago. It was seen that the Consultative Committee of Indian Jurisprudence constituted in 1827 consisted of caste chiefs. These chiefs of castes called Nattanmaikarar were elected on the basis of majority vote by all heads of families. Once elected, they held office for life and were not free to take a second wife. In fact among Sengundars marriage *thambulam* used to be exchanged in the presence of a Nattanmaikarar. The system has almost died out and not much importance is attached to the position of Nattanmaikarars nowadays.

Manners and customs :

A good many of the castes found in Tamil Nadu are represented in Pondicherry and Karaikal regions. Their manners and customs do not differ much from those in Tamil Nadu. Hence it will not be practical to give a detailed account of the manners and customs of all the different communities. Nevertheless, a few vignettes of the scenario may perhaps be presented, based primarily on the monographic studies carried out by the Census Authorities in the sixties about some of the communities living in Kadirkamam, Thimmanayakanpalayam, Virampattinam and Thengathittu in Pondicherry region and Tirunallar in Karaikal region.

Ear-boring ceremony : Ear-boring and tonsuring are very common among villagers. The ceremonies are held in childhood, sometime when the child is about one year old or even three years. Prior to these ceremonies, *pongi eauthal* is celebrated in propitiation of the family deity. The first hair of the child is offered to some deity. These offerings are carried out either in the local temple or at places like Tirupati, Palani, Mylam, etc. Sometimes the whole family shave off their hair on such occasions.

Puberty rites : The attainment of puberty by a girl is considered to be an important event. It entails pollution for certain number of days at the end of which the *manjal neer suba sadangu, ruthu mangala snanam* or *ruthu santhi* is arranged. The girl is given an oil-bath to terminate pollution. Among Reddiars

the ceremonial oil-bath is given usually by a washerwoman who takes for herself the clothes whether old or new worn by the girl at the time. A new saree and a blouse are presented to her by her maternal uncle and given *puttu* (baked rice flour) to eat. Among some communities a *nalangu* ceremony is performed to ward off the effects of evil eyes. In the past, girls were not allowed out of their houses even to attend school and were given in marriage soon after. This restriction is fast disappearing. Nowadays the ceremony is gradually tending to become more informal especially among those who have come under the influence of modern ideas.

Marriage customs and rituals : In the XVIII century marriage ceremonies lasted several days. A *pandal* beautifully decorated for the performance of dancing girls used to be erected in front of the house in the middle of the road. The bride and bridegroom, seated in a decorated palanquin, were taken on a procession to the accompaniment of music and fire-works according to the status of the family.⁷⁴ Nowadays the fashion is to take in procession the newly married couple in an open decorated car on slow motion to the accompaniment of band music.

Marriage is preceded by a betrothal ceremony known as *nichaya thartham*, *kaithamboolam matruthal* or *pariam panam varthal* which takes place in the bride's place after ensuring the compatibility of the horoscopes of the bride and bridegroom. Prior to this, the bridegroom goes to the bride's place to see her. The marriage ceremony is marked by *pandakkal nattuthal*, *penn azhaithal*, *mappillai azhaippu*, *kappu kattuthal*, *gowri pooja*, *thalikattu*, *moi seithal*, *ennai nalangu*, *dharai varthal* (*kannikadhanam*), *ammi mithithal* and *arunthathi parthal*. The second day function is called *boothakalam*, *ambogam* and *maruvunnal*. Certain months are considered favourable for marriages. For instance, more marriages are celebrated in the months of Thai, Panguni, Chittirai, Vaikasi, Ani and Avani.

One effect of the French rule is that marriage contracts are to be registered in the Commune Registry under article 63 of the Civil Code. Marriages will otherwise be invalid even if solemnised by priests according to religious rites whatever may be the *bona fide* of the persons concerned.

Pregnancy ritual : Some communities observe a ceremony known as *poo-choodal* or *valaikappu* on the fifth, seventh or ninth month of a woman's first pregnancy. Among Asaris the ceremony is known as *sool seithal* which is performed by their own priests known as *upathyayars*. Some communities

observe *seemantham* which takes place in the husband's place. Among Brahmins the *valaikappu* is performed in the house of the woman's parents during the fifth month of pregnancy. After a holy bath, the woman decked in flowers and surrounded by women relatives, is dressed in new clothes. A group of elderly married women perform the *arathi* to cast off any evil eye on her. Among some communities the ceremony is known as *muthuneer kottuthal*. This function is performed to ward off the effects of evil eye on her. *Seemantham* is held usually in the husband's house before the *homakundams* prepared by purohits to propitiate the gods to endow the first born with health, both mental and physical.

The delivery of the first child takes place in the house of the pregnant woman's mother. The new born among some communities is fed with *sevennai** or sugar water. During the post-delivery period the mother is subjected to certain diet restrictions for the first few days. A delivery entails pollution for nine days. On the tenth day, the purificatory ceremony known as *punyahahavachanam* is performed with due ceremonies to terminate pollution. The Brahmin priest who prepares the *homam* (sacred fire) sprinkles water sanctified by *mantras* all over the house in order to purify the house. Among some communities, an informal naming ceremony takes place on the eleventh day i.e., the day after *punyahahavachanam* when the horoscope is prepared. Usually a child is given the name of its grand parents or the name of some popular deity. The mother is usually allowed to go out of the house only after this.

Funeral rites : Among Hindus the dead are either buried or cremated. The period of pollution, however, varies from community to community. Some communities like the Asari's bury the dead in the sitting posture. The body, before being placed on the bier, is bathed in cold water. The eldest son or the next to him acts as the funeral celebrant, who lights the funeral pyre. In case of the death of a virgin, a token marriage is performed in the cremation ground. The milk pouring ceremony known as *pal eduppu* or *pal sadangu* takes place on the second day and is done to propitiate the soul of the deceased. On the fifteenth day *kal eduppu* ceremony is performed. The sixteenth day ceremony is known as *karumathi*. On this day the funeral celebrant is subjected to *thalai kattal* i.e. the ceremony of wearing a turban or *subha sweekaram*. Mourning is observed for the whole year. Brahmins and certain other communities perform what is called *masyam* i.e., monthly obsequies to the soul of the dead in all the twelve months during the first year.

* *Sevennai* is an admixture of castor oil with palmgur, dry ginger and other herbs.

Beliefs and practices :

Tradition, taboos and superstitions : The evil eye known as *kan thristy* is said to be the cause of many minor ailments such as stomach disorder, loss of appetite, etc. In the case of adults, the evil eye may be cast by praising one's health or wealth or if watched by a dog or other people while eating. A remark that one works day and night like a bull is sufficient to cause body-ache, fever, indigestion and other ailments. The spell of the evil eye is sought to be prevented by putting a black dot either on the forehead or on the cheeks of the child. Some perform the ritual of *thristy sutral*.

When a girl is pregnant margosa leaves are placed on the roof or tied across the door to ward off evil spirits. The new borns are sometimes branded with hot iron needles on the body to ward off evil spirits. Some still believe that death among children is caused by the entry of evil spirits into the body. To avoid this after delivery, the mother is kept in a dark room and a footwear is kept near the feet. A sickle with margosa leaves are kept near the hand. The room is also covered with these leaves. Even when it is necessary for the women to go out of her room, she is expected to carry the leaves in one hand and the sickle in the other.

Sorcery is said to be the cause of the death of young babies which die of symptoms of diarrhoea or general debility. Very often one may come across a baby with a black or red or saffron coloured thread tied round the neck or wrist. Some tie a *thayathu* sold by some magician. This is considered to protect or prevent the effect of evil spell cast by magicians. It is also used for fever, fits, ghost trouble or due to what is called *kurivithosham, kokku thosham, thevangu*, etc.

When the eldest child in a family dies, the body is cremated and the bones are powdered without the knowledge of others and thrown into a river. It is feared that if this is not done, some magician may exhume the bones of the deceased and use them for his black magic. It is also feared that the mother of the child whose bones are thus exhumed may not beget any child thereafter. Sometimes in order to prevent this calamity, the dead are buried in the backyard of the house itself or someone is put on a watch for three or four days. The *sooniam* is detected in the shape of a tin (folded) and placed on the roof of the house or buried under the earth. Some exhume it after it is investigated by *pujaris*.

People also believe that the soul of the person dying of an unnatural death, like suicide, drowning, accident, etc. haunt particular places, houses, foot paths etc. These evil spirits, it is believed, attack the people or follow anyone carrying non-vegetarian food or women taking bath in the evening. On the news of an unnatural death in the village, people especially women and children do not stir out of their house at night. The person in whom the ghost enters, runs amuck, jumps, dances, gets fever, hysteria, hears strange noises, etc. These cases are treated by magicians who drive away the ghosts by tying a coloured thread with knots round the neck or by offering special water to drink. Although elderly people still believe in magic and witchcraft, their popularity is very much on the decline.

Auspicious times : Certain hours of each day known as *ragukalam* are considered inauspicious for starting any activity or for performing any function. It is considered inauspicious even for treatment, hospitalisation and surgical operations. Tuesdays, Fridays and festival days are inauspicious for travel, for spending money and even for calling on a doctor for urgent treatment.

Fasting : Fasting is observed by Hindus to appease their gods and especially by the ladies for their husband's life. Usually, only one meal is taken a day.

Oil bath : To have an oil bath once a week is a common custom. The whole body is smeared literally with oil and bath is taken after some hours with soapnut powder to remove extra oil. It is supposed to remove excess heat from the body, improve complexion and appetite. Even infants are given oil bath and oil is poured into eyes, ears and nose.

Inter-caste relations :

Some curious instances of mixed castes and their duties are recorded in the inscriptions. These show that there were mixed castes known as *anuloma* and *pratiloma*. From an inscription dated 1169 A.D. the class of *rathakaras* is understood to have included blacksmiths, goldsmiths and stone masons, besides carpenters. The *smriti* makes them children of *vaisya* women and *sudra* men; one of the inscriptions calls them children of Brahma Vaisya. They seem to have been accepted as a *pratiloma* caste. Their profession was weaving and it was their privilege to supply fresh cloth for *upanayana* and

other domestic ceremonies, for *djvaja-patas* to the temples during festivals and generally to supply all things made of yarn and required by gods, brahmins and kings. In 1127 A.D. some families of this caste accepted some *iraiyili* land at Tirubhuvanai and in return undertook to supply clothes to the local temple on specified occasions and in stated quantities; they authorised the Sri Vaishnavas of the temple to surround (their dwellings), to imprison them and to take all steps necessary to force them to keep the engagement if they were in default.

Although caste distinctions are still maintained, they are not so rigorous as some years ago. Inter-caste marriages are, however, still very rare. The Brahmins attach great importance to *gotras* although of late inter-marriages among sub-groups viz., Vadamas, Vathimas, Brahacharnam, Ashtasahasram and Sholiar are met with. Pathars and Asaris inter-dine and inter-marry. In spite of the fact that Sembadavar and Pattanavar are fishermen, the former consider themselves superior to the latter and do not inter-dine or inter-marry with Pattanavars although economically they are more backward. Vanniars inter-marry and inter-dine among their sub-sects. Though there are exogamous sects among Reddiars, it is not a barrier to marital relations. Saivites and Vaishnavites also inter-marry. But other kinds of social relationships exist between members of different castes more particularly among the educated and urban population.

Property and inheritance :

Article 6 of the *arrêté* of 6 January 1819 stipulated that all Indians, whether Christians, Muslims or Gentiles shall be judged as in the past, according to the laws, usages and customs of their castes. Such laws, usages and customs were applicable to all matters relating to adoption, marriages, succession, inheritance of property, etc. The right of inheritance was determined as per the law of Mitakshara.

A widow was not entitled to dispose off the properties inherited by her in the manner she liked although she was entitled to the enjoyment of the income derived from it. Whenever a person left behind two widows, each one was entitled to an equal share of the property, and on the death of one of them, the property devolved on the surviving widow. This was the position till 1917, when the *Cour d'Appel* proclaimed the absolute right of the widow

over property inherited from her husband. Similarly there was a major departure from the Hindu law on the rights of daughters over properties inherited by them from their father. Accordingly they were allowed to bequeath their ancestral properties to their children. Illegitimate children were not entitled to the properties of their father. However, they inherited the property of their mother.

According to the Hindu law whenever a person gave up his religion or was expelled from his religion or caste, he would forfeit his right of inheritance to his ancestral property. This position was altered by a decision of the Tribunal in 1915.⁷⁵

The joint family system is still in vogue especially in the rural areas. A survey carried out in 1965 at Bahur showed that out of 65 houses surveyed as many as 47 fell under the category of joint families. Such families are under the authority of the father and after his death, the eldest son takes over as the head of the family. As long as the properties remain undivided, the eldest son must have towards his brothers the affection which a father has for his sons and the wife of the eldest son must be considered as the mother. In families where all the grown-ups go for work, the children are looked after by the older siblings.

As early as in 1769, the question whether it was open to the natives to make their will came up for consideration. Article 10 of the *règlement* issued in the same year settled the matter beyond doubt. The natives were required to execute a will in the presence of a native registrar and other witnesses. This may be regarded as the first nail driven on the coffin of the joint family system in Pondicherry.

Soon after merger, the Partition Act, 1893, the Hindu Disposition of Property Act, 1916, the Hindu Inheritance (Removal of Disabilities) Act, 1928 and the Hindu Succession Act, 1956 (with modifications) were extended to this Territory with effect from 1 October 1963.

Marriage and morals :

Although polygamy is allowed among Hindus, monogamy is generally the socially accepted norm nowadays. Among Sembadavars polygamy is freely allowed. In some cases, soon after betrothal, a man and woman start living as husband and wife without going through the marriage ceremony

Their issues are considered legitimate and the father and mother get married at any time convenient to them. Even if a man lives with a woman the community recognises them as husband and wife. But all this happens chiefly due to the poor economic status which makes marriage celebration an inexpensive affair. The Special Marriage Act, 1954 and the Hindu Marriage Act, 1955 were extended to this Territory together with the modifications on 1 October 1963.

Child marriage : The average marriageable age was about sixteen years although there were numerous instances where persons got married at the age of thirteen and fourteen.⁷⁶ The system of child marriage has now almost disappeared. The Child Marriage Restraint Act, 1929 was extended to this Territory on 24 May 1968.

Consanguineous marriages : Marriages are contracted mostly with consanguineous relatives. The preference is for one's own sister's daughter followed by paternal aunt's daughter as well as maternal uncle's daughter. This practice is fast disappearing among the educated.

Dowry system : The dowry system is prevalent among most communities with the rates varying according to the economic status of the parties entering into marriage. Among Brahmins especially, when the grooms are educated, the rate varies according to the standard of education and status of the groom. Among Sozhia Vellalas dowry is neither given nor taken. The system is not prevalent among Reddiars and Sengunda Mudaliars although it is called *seer varisai* which is presented by the bride's father. The quantum of these gifts too varies according to the economic status of the families concerned. Though dowry is not accepted in certain other communities, the groom's party may insist that a certain quantum of jewels be given to the bride. Dowry system is not prevalent among Pattanavars but bride price known as *pariam panam* is given by the groom's party to the bride. The Dowry Prohibition Act, 1961 was extended to this Territory on 24 May 1968.⁷⁷

Widow marriage : As late as in XIX century the practise of *sati* was found to exist in Pondicherry. For instance, a Brahmin lady committed herself to funeral pyre to join her late husband in heaven.⁷⁸ In fact the *arrêté* of 22 January 1830 prevented a widow committing *sati* and accorded her a life pension. Widow marriages are not common although widowers are at full liberty to remarry. Among Reddiars a stigma is attached to the

remarriage of widows although widowers remarry. Among pariahs, remarriages of widows and widowers are common. It is also allowed for a woman in this community to live with a man without being legally married to him. This practice is known as *serthu kolluthal*. Sometimes such persons get married conveniently at any time even after the birth of some children. Among Pattanavars no ceremony is attached to a widow marriage. In an informal and simple function the man marrying the widow ties round the lady's neck a turmeric stained twine and with that the function concludes. This is known as *naduveetu thali kattuthal*.

Among Sengunda Mudaliars, widow and widower's remarriage is not prohibited although widows do not generally remarry.

Divorce : Among most communities divorce is not prevalent. Among Vannars, however, divorce is freely allowed to either party on payment of twice the bride price and they can marry again.

The question of divorce among Hindus is now governed by the Hindu Marriage Act, 1955 which was extended to this Territory on 1 October 1963. The Hindu Adoption and Maintenance Act, 1956 was extended to this Territory on 24 May 1968.

The Devadasi system : *Devadasis* or *dasis* formed a separate caste. Under this system a girl from each family was dedicated for temple service by *pottukattal*, the ceremony of imprinting a *tilak* mark on the forehead with a hot iron. These girls were attached to some of the temples in Pondicherry, Karaikal, Tirunallar and Villianur. Le Gentil writing in 1769 attests to the fact that no festival, marriage or procession would be held in Pondicherry without their performance and that they were held in respect by the community.⁷⁹ In due course, however, the *devadasi* system degenerated into open prostitution. In 1913, the Tribunal of Pondicherry pointed out that the system had altogether lost its original significance. But with the abolition of this practise in British India, the system gradually disappeared in Pondicherry too. However, those employing minor girls in the profession came to be charged under Article 334 of the French Penal Code.⁸⁰

The *Devadasi* system confined to the Isai Vellala community was in vogue in Tirunallar till about 1940, when there were about eight girls attached to the temple. Their duties included fanning the deities while taking them out in

procession, singing and dancing on important occasions. Following a resolution passed by the conference of members of this community in Kumbakonam, the practice was stopped. The male members of the community, however, continue to play musical instruments in the temple.

Prostitution : The absence of dry law, the flow of tourists and sea traffic were inducements enough for the growth of prostitution especially in the towns of Pondicherry and Karaikal. As the indiscriminate proliferation of prostitution in the town posed a health hazard, the French administration came forward to license the profession in 1954. This measure was, however, withdrawn subsequently. ⁸¹ Those found indulging in the profession were rounded up on charges of vagabondage (Art. 269 and 270 of the French Penal Code).

After merger, however, there was further proliferation of prostitution in the towns mostly confined to lodges. With the extension of the Suppression of Immoral Traffic in Women and Girls Act, 1956 to this Territory on 24 May 1968 and the opening of the Rescue and Protective (Shelter) Home at Reddiarpalaiyam in June 1973, facility was provided for the first time for separate confinement of those convicted under the Act. Those remanded to custody are detained in the Central Prison.

Addictions : Alcoholism, smoking and betel chewing are the three common types of addictions among grown-ups, especially among those above fifteen years old. Certain communities are found to be more addicted to drinking than others. For instance, Brahmins and Asaris are not so much addicted to drinks. Fishermen are proverbially addicted to drinking. By and large, members of the economically backward communities are more addicted to drinks. The poor man's drink is toddy, while the well-to-do go in for foreign type of liquors like brandy, whisky, rum, gin etc. Brandy is very popular among the retired French personnel. Toddy is obtained from palmyra and palm tree. An incision is made in the spadix and a mud pot is tied to it in such a position that the juice trickles into it. The juice gets fermented after a few hours. It is a rich source of vitamin B which is deficient in the diet. Some people resort to excessive drinking of toddy during harvest season. In the villages the agricultural workers, lime workers and the nomadic tribes drink toddy. The latter sometimes cook their food with toddy.

Betel chewing with or without tobacco is another common addiction, more common among women. Some use betel nuts alone or in combination with lime and betel leaves. Sometimes it is the first thing put in the mouth in the morning and removed only at meal times. Some use it to suppress hunger. Women beautify their face by reddening their lips. Some believe, it cleans the mouth and teeth. Others use it to mask foul smell. Betel chewing is slowly loosing its clients while smoking is on the ascendancy.

Home life :

Types of dwellings : The dwellings can broadly be placed under three categories viz., thatched huts, houses with tiled roofs and terraced houses. Houses are either thatched with *vezhal*, coconut or palmyrah leaves. Terraced structures are few in the rural areas. While the first type of houses are common in villages, the last two are found in urban as well as urbanised centres. A house generally contains a *therukuradu* (verandah) with tiled roof built in a slope with *thinnai* (pial) on either side opening into a small verandah known as *therunadai*. Adjoining to the *therunadai* some houses have a room called *nadai arai*. The *therunadai* takes one into the house to the square shaped *thavaram* running on all four sides or three sides. This portion of the house is either tiled or terraced with a square shaped patio like opening at the centre serving as a kind of wind tunnel for houses that do not have openings on the side. Adjoining the *thavaram* are built one or two rooms known as *koodam*. Some houses have facilities for *pooja* in the *koodam* itself or have separate *pooja* rooms. The *thavaram* often serves as a kind of drawing room as well. The *koodam* provides privacy for the family. Beyond the *thavaram* lies the kitchen. The *thotta nadai* leads to the backyard. Some houses have wells and latrines in the open garden or backyard. Most of the urban houses have open backyards where generally the well and the cattle sheds are located. Huts are built with mud walls. The foundation is not very deep. Bamboo poles, coir ropes and sometimes wooden rafters are used to build the huts. Generally mud floors are pressed, levelled and smeared with cowdung. Such huts do not have pials. The cooking is done in a corner. Tiled houses are built on firm foundations.

A simple ceremony is held while laying the foundation for house construction. On an auspicious day a small pit known as *sani moolai* is dug at the northern end of a site and an elderly married woman sprinkles turmeric water on the pit. Pillayar poojai is then performed by a group of *sumangalis*

(married women with their husbands alive) after lighting camphor near the *sani moolai*. A small quantity of cowdung made into a conical shape symbolises God Pillaiyar to whom pooja is performed. Dharba weeds are placed on the image, a coconut is cracked and camphor is lighted. Betel leaves, plantain and arecanuts are distributed to those present. The construction is begun on any day after that, convenient to the family. Sometimes, a similar ceremony is observed at the time of fixing the *vasal* i.e., the door which forms the main entrance to the house. The door frame is smeared with turmeric paste, vermilion and decorated with flowers. Then pooja is performed. Five *sumangalis* perform the ritual with the help of male members who fix the door frame. The masons and carpenters engaged in the construction work are honoured on this day with presentation of dhoties and towels by the prospective house owner. *Pan supari* is then distributed to one and all present. In all Hindu communities, after completion of the house construction, a function known as *grahapravesam* (formal occupation of the house) is performed before occupation.

Most Hindus draw *kolums* i.e., symmetrically shaped floral designs with white powder in front of their homes. Some also use red powder and saffron. In the month of *margazhi* they adorn them with flowers which are fixed on cowdung balls. Some still paint the mud and tiled floor of their house with cowdung mixed with water, especially on Fridays. The house cleaned thus is believed to be free from pollution. Some say that it serves as a germ killer.

Furniture : The kind of furniture used in a house serves as an index of one's wealth. The more one's wealth, the greater are the items of furniture in a house. It could also be taken as an indication of the cultural orientation of the family or household. Benches and stools are more common in villages while chairs, sofas, almirahs and cots are met with more often in urban areas.

Dress : La Farelle has left us a description of the dress worn by women in XVIII century Pondicherry. They wore sarees and were not particular to wear upper garments like blouse or jacket. The rich women wore silk sarees with gold or silver *ottiyanam*. The hair was decked with gold or silver pins adorned with gems. ⁸² The fact that women were not particular to wear the jacket is corroborated by Le Gentil. According to him the wearing of jackets was the prerogative of the women of Telugu origin. ⁸³ Dancing girls were, however, an exception.

There is no marked difference in the dress style of people belonging to the various communities in the villages nowadays. Generally, the villagers use only cotton clothes all round the year. Men wear dhoti with or without shirt, towel, shawl or banian. Those working in the field or engaged in manual work tie the towel round their head. Women wear saree and blouse. Aged women among certain communities do not wear the blouse. The mode of wearing the saree by women, other than those of the Brahmin community, does not differ very much. Middle aged Brahmin women follow the traditional mode of wearing the saree with *madissaru*. Under this style, the portion between the knees and ankles on both legs have the appearance of pyjama. In the Iyer style of *madissaru*, this pyjama-like appearance is on the right leg, while on the left leg a number of pleats hang down from the waist. The saree pallav always rests on the right shoulder. The Brahmin style of wearing the dhoti is known as *panchakacchan*. School boys use shirts and pants while girls use skirts known as *pavadai* in Tamil and jackets. Poor children use old pieces of unsewn cloth round their waists leaving the upper part of their bodies bare.

It may be recalled here that as late as in 1828, the Tribunal de simple police condemned the pariahs for having worn chappals in violation of the local ordinance of 25 May 1827. This was confirmed by the *arrêté* of 5 May 1857. Further in 1828, a dispute arose in Grand' Aldée between Vellalas and Cavarais on the one hand and Kammalas on the other, touching on the right of Kammalas to wear chappals. This right was confirmed by the order of 27 October 1828 based on the advice of the Consultative Committee. People are increasingly getting accustomed to the habit of wearing sandals and wrist-watches.

Ornaments : Speaking about women in the early part of the XVIII century, La Farelle says that their sole ambition was to get themselves bedecked with jewels, the scale and value of which varied according to their wealth. Costly pearls and gems set on heavy gold or silver adorn the ears which, according to the taste of the country, was the more beautiful depending on the length.⁸⁴ Some of the jewels commonly used in villages are *addikai*, *jada billai*, *mustheppu* and *vakku chitti*. The rich use the *mustheppu* which is worn along the parting of the hair. *Addikai* is a chain made of gold studded fully with stones of red or green colour. *Jada billai* is a round shaped jewel studded with either white or coloured stones with a

hook at its back. It is placed at the back of the head, the plaits holding tightly the hook of the ornament. Some of the women also wear *metti* in their toes. The *jalara kolusu* made of silver is worn by girls and young women as a sort of anklet. Women sometimes wear nose screws and earrings. *Vanki* is worn in the upper arm. Ladies apply turmeric to their body while bathing to keep their skin smooth, clean and in order to improve their complexion. Applying black paint to the eyelids to heighten their beauty is also common. Women sometimes use *mehendi* known as *maruthani* for colouring their palms, fingers and toes. Painting of vermilion on the forehead is considered sacred and a symbol of womanhood by women belonging to all communities in the village. Mostly men and very rarely women, especially the old, wear the saivite mark known as *poosai* on their forehead.

Food : Rice is the staple food. Except Brahmins, most other communities are non-vegetarian. The poor take cold rice or *kanji* in the morning. Some take *kevuru kuzhu* prepared out of ragi. In many of the households, on Fridays and on auspicious occasions like '*ammavasai*' (New moon day) and *kiruthigai*, food is offered to their gods before commencing of dining.

Utensils : Stainless steel, brass, aluminium, bronze and mud vessels are in use according to the circumstances of the family concerned. There are neither urban nor rural characteristics as such. The common utensils used are *kudam*, *thekkusal*, *anda*, *bohini*, *sombu*, *tumbler*, *kuvalai* and sometimes *anaikal kuvalai*, *thavalai*, *adduku satti*, *kundan*. *Kudam* is used to carry water. *Anaikal kuvalai* which is made of brass is used for storing water. *Thekkusal* or *thavalai* also made of brass is used for cooking rice. *Anda* is used for storing water. Small cups known as *sarvam* are also used. *Sombu* is a small vessel for taking water for minor uses.

Mud vessels known as *sal satti* is used as bathing tub and *satti* for cooking food. *Karandi*, made of brass or iron, is used for serving food. *Thambalam* also made of brass, is used for drying grams or for serving food or *pan supary*. The *panikkam* is used for spitting. This utensil is invariably found in all Sembadavar's houses. *Vettrilai thepai* with bifurcations inside is used for keeping betel, arecanut, spices, tobacco and lime. Plates and saucers are becoming popular and the use of leaves for serving food is loosing ground.

Recreation and amusement :

Noticeable variations are discernible in the recreational habits of people in urban areas as well as among those of different social status. In general, the urban male population spend their evenings in the out, some in recreational clubs, others in sports clubs, etc. There were clubs, popularly known as 'Cercles' in urbanised areas for different groups of citizens. The **Cercle de Pondichéry** and the **Cercle Sportif Pondichérien** are two of the old prominent clubs in the town of Pondicherry. There were also some places where cock-fights with bets were arranged.

A number of youth clubs have sprung up in the town and in the rural areas recently providing facilities for playing caroms, chess, weight lifting, etc. In some clubs, games like cards, bridge, caroms, chess, etc. are played. Dramatic and other cultural performances by troupes from outside the Territory are also organised by local *sabhas* from time to time providing entertainment to the people. Circuses, wrestling bouts, tournaments and exhibitions also draw large crowds. *Mascarade* and *puliattams* are held seasonally.

With the advent of the movies, cinema halls came up in the town of Pondicherry. They are frequented by individuals, groups or families. The statement below gives a picture of the growth of cinema halls in the Territory between 1956 and 1976:

Permanent and touring talkies region-wise		1956 Number	1966 No. Seating capacity	1976 No. Seating capacity
<i>Pondicherry region :</i>				
Permanent talkies	..	4	9 8,062	19 15,910
Touring talkies	..	6	25 18,625	14 9,349
<i>Karaikal region :</i>				
Permanent talkies	..	3	3 2,278	4 3,247
Touring talkies	..	2	2 1,300	3 2,052
<i>Mahe region :</i>				
Permanent talkies	..	—	— —	— —
Touring talkies	..	1	— —	1 500
<i>Yanam region :</i>				
Permanent talkies	..	—	1 650	1 620
Touring talkies	..	1	— —	— —

There are a few urban dwellers who go hunting for birds to Usteri, Bahur, Pakkamudiyanpet, etc.

Petangue is a game unique to Pondicherry in India. This game is usually played by retired soldiers of the French army settled in Pondicherry. Players may be seen in action near Gingee Salai, around the church in rue Dumas, within the campus of Cercle Sportif, etc. Sri Aurobindo Ashram has its own play grounds, swimming pool, library, theatre and stadium to provide recreational facilities for its inmates. While radio is popular among all sections of the population, television has made its entry recently, the rich having their sets at home and the poor viewing them at public places.

The villagers have very little recreation. They spend their time in idle gossip, playing cards, smoking or drinking. Village fairs and festivals also provide occasions for joy and gaiety through *teru koothu*, *kathakalakshepam* and *villu pattu*. Youngsters perform *chilambattam*, the traditional art of self-defence although rarely. The large number of community listening sets and libraries in the rural areas provide entertainment combined with education.

Communal life :

The Territory's communal life has by and large been marked by harmony except for occasional flare-ups between different castes and religious communities. The Governors of French India were the final arbiters in all disputes between castes. Since 1827, the Committee for Indian Jurisprudence guided the administration in resolving many a caste dispute which seemed to threaten communal harmony in the Territory. Effective and timely intervention by the law and order authorities have helped to defuse such flare-ups. Julien Vinson refers to a Hindu-Muslim conflict which occurred in 1884 at Karaikal. Some Muslims objected to a Hindu funeral procession passing through a road behind a mosque. They had not objected to Christian funeral processions passing through the same road. The Court naturally dismissed the plea of the Muslims. 85

Since merger, there have been few major instances of communal disturbances in the Territory. There have been instances of quarrels leading to open fights between villages. Such quarrels purely fall within the realm of law and order and cannot be treated as communal disturbances.

Pilgrim Centres : Pondicherry town, because of Sri Aurobindo Ashram and Villianur on account of the Church of Our Lady of Lourdes, may be regarded as pilgrim centres in Pondicherry region. The temple of Chengazhuneer-
amman at Virampattinam is also visited by people from surrounding villages. The shrine of Sanceswara Bhagavan secures for Tirunallar the title of a pilgrim centre. The Church of St. Therese of Avila in Mahe has acquired some fame as a pilgrim centre. (For more details see Chapter XX-Places of Interest).

Festivities : The Bogi Pandigai, Pongal, Maha Sivarathri, Sri Ramanavami, Panguni Uthiram, Chittraipournami, Krishnajayanthi, Vinayaka Chathurthi, Ayudha Pooja, Navarathri, Deepavali and Vaikunda Ekadasi are not only days of religious importance but also occasions marked by festivities. During Pongal, the poor rickshaw pullers of Pondicherry build hut-like enclosures with sugar-cane stems and pass the night, singing and dancing to the rythm of drum music and folk songs. The Karinal following Mattupongal is marked by exchange of gifts, presents and sweets. Keralites in Pondicherry celebrate Onam.

Since merger, the Republic Day and the Independence Day are celebrated on a grand scale. The celebration on both the days is marked by a ceremonial parade, march past and flag hoisting. A reception hosted by the Lieutenant-Governor is held in the evening. The Republic Day is marked by pageantry and procession of floats presented by various Departments depicting achievements in different fields. The Raj Nivas, the Monument at the centre of 'Place', Hôtel de Ville, the Secretariat, the Legislative Assembly and many other buildings are illuminated on the occasion which attracts a large crowd of people from the villages. The Pondicherry Municipality arranges for games and competitions in the evenings.

In the outlying regions, the day is marked by flag hoisting and a parade in the morning and a reception in the evening. Although *de jure* Transfer Day (16 August) is a public holiday, it is not marked by any festivity.

The birthday of Mahatma Gandhi which falls on 2 October is also a day of celebration. The Cleanliness Week and the Leprosy Week are launched on the same day every year. A ceremony of garlanding the statue of Mahatma Gandhi is observed followed by charka-spinning and recitations from the Gita, Quran and Bible.

Since 1955, May Day is a public holiday in Pondicherry. In 1971 the Pondicherry Industrial Establishment (National and Festival Holidays) Act, 1964 was amended to declare May Day as a national holiday for industrial workers. The day is marked by processions and public meetings organised by workers, trade-unions and political parties.

The French community in Pondicherry observe 14 July as 'Bastille day' which used to be a holiday during the French period. Prior to merger, the occasion used to be marked by gun salutes, flag hoisting, ceremonial parades, processions, illumination of buildings and ships at anchor. The Pondicherry Municipality used to arrange skill games, competitions and water sports on sea. Since merger, the day is celebrated in a subdued manner. Wreaths are laid at the War Memorial by the **Consul Général de France**, and a representative of the Administration takes part in the function. In the evening the French **Consul Général** holds a reception.

The **Mascarade** is another form of popular festivity in Pondicherry. Wearing fantastic masks and fancy costumes, revellers go round the streets singing and dancing to the accompaniment of accordion and trumpet music on certain festival days.

Mahe Region :

According to a study carried out by Esquer more than 100 years ago, besides a few Brahmin sub-sects, several sub-castes under the fourth division of Sudras were represented in the region. Members of the Kshatriya and Vaisya castes were conspicuous by their absence.⁸⁶ Under the fourth division of Sudras there were those who formed the nobility of the country viz., Nambiar, Nair, Kurup, Panikkar, Adiyodi, Menon, etc., those engaged in temple service viz., Ambalavasigal, Akapoduvals, Bicharadi, Nambisen, etc., the third group of emigrant bankers, merchants, oil-mongers, tradesmen or weavers from the Tamil, Telugu and Canarese countries like Komutties, Chetties, Vaniens, Chaliens etc. Thiyyas formed the fourth group. They were mostly cultivators, agricultural workers or tappers. There were different classes of Kammalas like Asary, Thattan, Kollan, etc. Mukkuvas were fishermen. Then there were Navien, Vannan, Vettuvan and Valluvan. The sixth group consisted of Pariahs (Pulayas).

The above caste structure of society had almost crumbled, although the association of certain castes with certain professions is still very much evident especially in the rural areas of Chalakara, Pallur and Pandakkal. Thiyyas

are associated with agricultural labour although there are now traders, shop keepers, *vaidyas* (physicians) and civil servants among them. Mukkuvas are mostly fishermen. Besides these, there are Nairs, Vaniars, Chaliars, Chettis, etc. But with the spread of the teachings of Sri Narayana Guru and the temple entry movement launched by Mahatma Gandhi there is a change in the outlook of the people.

The social life of the people in Mahe is almost the same as that of northern Kerala. Special ceremonies such as *thalikattukalyanam* observed even before a girl attains puberty, and the *tirandukuli* which is performed after a girl attains puberty, have now become obsolete. Marriage customs among Thiyyas and Nairs do not differ much. It usually starts with *ashtamangaliam* and ends with *grihapravesa*. Even the ceremony of *pulikudi* (tamarind juice drinking) performed during the pregnancy of a woman has practically disappeared. The dead bodies are usually cremated after a ceremonial bath. The *sanchayanam* which is the ceremony for the disposal of the remains is held on the seventh or fourteenth day. *Beliyidal* which is the ceremony of offering rice balls to crows is still observed by some families. *Sradha* is performed once a year to make offering to the departed soul.

Inter-caste and inter-religious marriages are still very rare although marriages between various sub-castes among Nairs are not objected to. Both the *Marumakkathayam* and *Makkathayam* system of inheritance were followed in Mahe till Marumakkathayam system was abolished by the *arrêté* of 28 April 1943. With the extension of the Hindu Succession Act, 1956 to this Territory in October 1963, men and women enjoy equal rights over property.

While the main enclave of Mahe is well advanced with many modern amenities, better houses, roads, drinking water facilities, transport, shopping centre, etc., Chalakkara and Pallur are backward. Pandakkal seems more backward probably because of its distance from Mahe proper. Some kind of a practice of bonded labour is found to exist in Mahe especially among Mukkuvas who are mostly fishermen.

Even the traditional polygamous communities have come to accept monogamy. Monogamy is now the generally accepted norm, though polygamy is not looked down upon. Polyandry is almost a thing of the past. Marriages between children of two brothers or two sisters is forbidden among most communities. Marriages with the daughter of a maternal uncle or paternal aunt is still prevalent. Among Nairs and Thiyyas, girls used to be given in

marriage at a very early age, i.e., even before they attain twelve years. In recent years, the practice has almost died out. The practice of giving dowry is not so prevalent among most communities. Wherever it is done, it is usually paid in cash. Widow remarriage is permitted among Nairs and Thiyyas as well as among Christians. There have been no known instances of prostitution or organised gambling in the region in recent times. The region has all along been a wet area. The people, especially the elders, are addicted to pan-chewing. Smoking is also common. Except rarely, houses are built in separate home-steads in the midst of an orchard or garden. The houses are generally provided with a *kolaye* (verandah) and a *kolayilagam*, *padinjattagam* at the centre, *vadakkini* and *tekkin* or *kizhakkini*. The *padinjattapura* is provided with a *chaypu* which serves as a storeroom. In some houses, the well is built close to the bathroom from where water is drawn through an opening in the wall, which is covered with a box-like wooden screen. The walls are usually built with large-sized laterite bricks cut from nearby quarries.

Families generally use brass plates and saucers, a betel box, a pot known as *kindi* for serving water, straw mats, coir cots and *nilavilakku*. The sophisticated and well-to-do families use modern items of furniture. In almost every Hindu home, the *nilavilakku* is lit and placed at the verandah both before sunset and sunrise which is altogether a beautiful sight.

Men generally wear the *mundu* and shirt. Those engaged in manual labour cover their body with a *torthu* which they tie round their head when at work. Even the poor, like those engaged in manual labour, show a preference to wear clean clothes. Women from educated and socially advanced families wear saree. Young boys have taken to trousers and shirts. Some old women still move about bare bodied except for a *mundu* reaching up to their waist. As for ornaments, *kadukkan*, *mukkuthi* and *thakka* were the fashion in the olden days. Now women wear chains, bangles and ear-rings. Most of the Hindus eat meat and fish. Rice is the staple food of the people although wheat has entered their menu in recent times. Popular items of breakfast are *puttu*, *appam* and *patiri*. Tapioca with fish is an important menu for the poor. The people usually take tea or coffee, although tea drinking is more popular. They use coconut oil for frying purposes. To most curries, coconut is added in some form or other.

The observance of fasts on important occasions like Shasti, Ekadesi, Prodosham, full-moon and new moon days is still common among religious minded elders. They avoid non-vegetarian diet on these days. Among festivals, Thiruvathira is celebrated in January. Husbands are expected to visit their

wives without fail on the occasion of Thiruvathira. Vishu, the Malayalam New Year day, is observed during April which is marked by display of fireworks. Rohini (August-September) and Navarathri (September-October) are also celebrated. The Karkidaka Amavasi, Sri Krishna Jayanthi and Sri Narayanaguru Jayanthi are also marked by some festivities. Vijayadasami is considered auspicious for *vidyarambha*, the beginning of children's education. Onam is the most important of all Malayali festivals celebrated in Mahe.

The 5-day Puthalam Thira in March and the 7-day Vaikunta Ekadesi in January and the 3-day Guruvayoor Ekadesi in December attract a few thousand people from the surrounding villages.

The three-day Thira festival of Theyyattam is celebrated at Pallur in the Malayalam month of Makaram (January-February), at Mahe Puthalam in the month of Kumbham (February-March) and also at Pando Koolam and Pando Kavu by the respective Nair or Thiyya *tarwads*. The ancient customs connected with these festivities are no doubt fast dying out although the celebration is held regularly. The Thira, beginning with an invocation to the ruling deity, commences in the evening and continues through the night to a good portion of the following day. The costumed and personated deity is then led to a raised platform called 'thara' where *pooja* is performed accompanied by hymns glorifying the deity. Music is provided by drums, pipes and cymbals. Drummers maintain perfect tuning and cadence increasing the tempo according to the mood of the deity. By the time the *pooja* concludes, the individual personifying the deity gets possessed. The festival attracts a large crowd.

Poorakkali is the usual form of dance performed by Thiyya men in their old temples. *Kolkali* is another popular dance although these days they are performed only by young girls in schools.

Yanam Region :

According to a study conducted more than hundred years ago by A. Esquer, three out of the four-fold division of castes viz., Brahmins, Vaisyas and Sudras were represented in Yanam. Among Vaisyas, otherwise known as Komutties, he identified many sub-divisions. Kapus topped the list of Sudras. According to Esquer, there were as many as 32 sub-castes among Sudras in Yanam. Apart from these, there were several castes lower than the Sudras.

There were some castes whose members were engaged in temple service while three sub-castes subscribed to the *devadasi* system. Although nowadays it is difficult to identify all the different ramifications of the four-fold division of castes in Yanam, there are Brahmins, Vaisyas or Komutties, Kapus, Chetti Balijas, Gollas or Yadavas, Palli or Agnikula Kshatriyas in the region. Madigas, Malas, Pakis, Yerragollas are some of the depressed classes in Yanam. Although the sanctions upholding castism have weakened they have not been completely broken.

The Brahmins in Yanam are few. Most of them have taken to English education and have entered the learned professions. Kapus constitute the major cultivating community and wield considerable influence in the region. The Vaisyas or Komutties form the next predominant community here. Trade is their principal occupation. Balijas form another important community. The Bogans or Kalavanthulus also call themselves Chettibalijas. Gollas or Yadavas belong to the shepherd caste. The Kammalas are mostly artisans. The scheduled castes together with the Palli fishermen count a little more or less than half the total population of Yanam. Madigas and Malas are mostly agricultural labourers and are employed in menial duties like burying the dead or beating the drums, etc. Some are cobblers. Untouchability was widely practised until recently and it prevented contacts among the different castes. The well-to-do among them no more follow their traditional occupations. The progress of education has no doubt opened the way for better occupational mobility. Some traces of bonded labour are found to exist among the poor agricultural workers in Yanam.

In the life of the Hindus, ceremonies like *garbhadanam*, *simantham*, *namakaranam*, *annaprasanam*, *kesakandanam* are still observed among orthodox families. Marriages are preceded by *nischithartam*, *kanyadhanam* and followed by *mangelyadharna talambralu*. The dead are mostly cremated. The bodies of the unmarried are buried. Balijas also bury the dead.

The joint family system is still prevalent in Yanam and the pattern of inheritance is based on the patriarchal system. Inter-dining and inter-caste marriages are still very rare although old concepts are fast dying out. Marriage alliances are mostly contracted only between families of the same caste or sub-caste. But with the minute differences among castes breaking down very fast, marriages between various sub-castes, for example between Balijas and Kapus, are now accepted.

Monogamy is the generally accepted norm among all Hindu communities. The practice of dowry (*oli*) is still common among certain communities like Baliyas. It is usually paid in cash and sometimes in the form of property and jewellery. The practice of early marriages, especially of girls before they reach puberty, has almost disappeared. Divorce is not common among any of the Hindu communities except Pallis (fishermen) and Chetti Baliyas. Widow remarriage is accepted among some lower castes and not objected to by other communities in recent times.

A few Kalavanthulus in Yanam followed the *devadasi* system until some years ago. They have since given up the practice and have taken to married life. Yanam having all along been a wet area, drinking is not looked down upon as a social evil although women folk have sentimental objections. Smoking, pan-chewing and the use of snuff are common. Men and women in Yanam smoke cigars. Some men and women smoke the cigar with the burning end inside their mouth.

The town of Yanam and the hamlets around it present an archaic look with very few modern terraced houses. Most houses are built with a low ceiling or roof. Some of the larger houses have verandahs in front supported by wooden pillars with a beautifully carved wooden door frame at the entrance. In the neighbouring villages, houses are mostly thatched with very little ventilation. These houses have a pial or an outer verandah.

Villagers sprinkle water in their front courtyard and also draw beautiful designs with *muggu* (white powder). Such designs are drawn even on the walls and all around doors and windows.

Men wear the long or short dhoti together with a *jibba* or *lalchi*, i.e., a collarless shirt. The poor labourers wear dhoti and *banialu* (upper garment). Women wear the saree which is passed round the waist and a knot is tied to keep it fixed and then folds are made in front. The saree is then tied tightly round the waist and its end is thrown over the left shoulder. They also wear the *ravica* (short tight jacket) and underwear called *langa*. All Hindu women wear *bottu* with *kum kum*.

The upper classes use necklaces, girdles, bangles, ear-rings and nose screws. The well-to-do women use jewellery made of silver, like *bundi* on the upper arms and *vaddanam* round the waist. A gold chain with a large pendant embedded with stones called *namapattakam* or *pattidi* is worn by rich women. Vaisya women prefer the *vaddanam*, *vanki*, *rettakadivam*, *nagottu*, *kasuladanta*, etc.

Rice is the staple food. The poor take cold rice or broken rice or ragi. Madigas and Malas eat beef. Pork is eaten by Yerukulas. The people have a special liking for hot *chutney* made of tamarind, chillies and salt. They use ground-nut oil for all culinary purposes.

People in Yanam proper as well as in the rural areas are accustomed to the use of furniture like table, bench, chair, stool, shelves, teapoys, chest of drawers, etc.

Some of the famous festivals celebrated in Yanam includes Sankaranti in January, Aydha Pooja and Deepavali in October. Sri Vaishnavites celebrate Sriramanavami, Sri Krishna Jayanthi, Vinayaka Chadurthi, Navararthri, Vijayadasami and Vaikunda Ekadesi. The Vishnu festival held in March in Yanam is a restricted holiday for the region. Similarly Mahasivarathri is sacred for Saivites. The Telugu New Year day is an occasion of communal festivity in Yanam.

Christians :

The early missionaries found that the caste system was deeply entrenched among their first converts. In fact, Roman Catholicism spread rapidly among Hindus as the observance of caste customs and practices was tolerated by missionaries among the converts. There were many converts from among Vellalas, Mudaliars and Reddiars. They continued to use the same Hindu religious marks and follow the same old practices which helped to minimise friction in their daily intercourse with their Hindu brethren. Christians of different castes followed their own caste customs and never intermingled with those belonging to other castes. The Christian converts continued to bear on their body the marks made with ash and always avoided the society of pariahs who were considered ignoble. Although most missionaries found that these practices were inconsistent with the teachings of Christ, they seem to have tolerated it as an unavoidable evil.

Anandarangapillai points out that a distinction was made in churches between the caste Christians and pariahs.⁸⁷ A separate wall was erected as a barrier on the northern side of the interior of the church. On one side of this, the pariahs collected for worship, and on the other, caste Christians, Eurasians and Europeans assembled. This privilege seems to have been obtained by the native Christians at some former time, and the distinction between castes was maintained. Father Coeurdoux, a missionary serving at Pondicherry was offended at this (1745) and instigated the low caste Christians to remonstrate.

They all went in a body to the senior priest and complained. The priest, having listened to them, declared that their complaint was just and ordered the demolition of the barrier. An evening service was held on that day in the church. No distinction of caste was observed. Eurasians, Europeans, Tamilians and members of the low castes mingled together and attended service. A few days later, however, the caste Christians objected to this new move and refused to enter the church. Subsequently a few Christians attended service, although a barrier of chairs was put up to separate the pariahs from others.⁸⁸

As for the fervour of native Christians, the *Lettres Edifiantes et Curieuses* reveal that their faith was strong and their piety very pronounced. Nevertheless they had their weaknesses which resulted out of their ignorance. M. Magny who served here as a missionary from 1774 to 1821 says that for the most part, Christians here followed Hindus. Sometimes they carried their sick children to be blessed by Hindu priests. They actively participated in Hindu festivals. Anandarangapillai records an interesting incident in his diary. The wife of Kanakaraya Mudali went to church, decked with all the ornaments that were worn by the women of her caste and a muslin gauze which was perfumed. She was admonished by the priest for this. He then summoned all the caste Christians and ordered that thereafter their women should not dress themselves with ornaments of the kind worn by Tamilians, that they should tie their hair after the manner of Eurasians etc. The local Christians strongly objected to this and refused to enter the portals of the church. The Christians turned out to be so adamant that the priest had to beg the Governor to issue an order compelling them to attend church.⁸⁹

The Christian women, however, continued to bear the *pottu* mark on their forehead and also wear the *tali*. Christian women were not permitted to go alone to the church for it was considered indecent and contrary to the honour of their respective castes. Even at wedding ceremonies, the Tamil Christians followed the local rites, such as the *manjal neer subha sadangu* etc. The neo-Christians continued to be very superstitious.

As caste Christians were particular in observing the caste regulations, the missionaries did not push their reforms too much fearing reprisals in parishes. In some of the churches, pariahs continued to be segregated by a small wall erected in the middle. Nevertheless, there were frequent quarrels between the upper caste and lower caste Christians.

Since the last quarter of the nineteenth century, there were symptoms of a new awakening among low caste Christians. This awakening gave rise to strifes between the upper caste and lower caste Christians, during the first decade

of this century. Small issues often flared up into major conflagration, whenever missionaries tried to mitigate the evils of castism among their laity. In Nellitoppu, the efforts of that ardent missionary Fr. Voltaire to put together the children of different castes of Pakkamudiyampet and those of Nellitoppu at the time of their first communion angered some of the caste Christians who in an act of revenge burnt down the houses of their low caste brethren in Nellitoppu.

Between 1907 and 1910, such measures as the removal of tufts among seminarians, inclusion of beef in the menu of the acolytes, the admission of low caste Christians to priesthood caused a great deal of resentment among caste Christians. Some families withdrew their children from the major seminary and the institution had to be closed down for some time. The resentment caused by the reforms was such that Archbishop Morel (1909) had to be consecrated under police protection. However, to assuage the feelings of caste conscious Christians, separate services were arranged for them in the chapel of Petit Seminaire.

There were again troubles in the twenties and in the thirties, particularly during the period of Archbishop Colas who insisted on the removal of rails etc., that separated the low caste Christians from the caste Christians in churches. Indignant Christians called him 'Para Colas' for having initiated these measures. Fr. Huguet bore the brunt of the opposition of caste Christians in Nellitoppu. The resultant strife led to the closure of the church for about four years there. In Pondicherry, a large number of families left the Catholic fold and joined the congregation of Seventh Day Adventists. Finding that many prominent caste Hindus themselves were in the vanguard of the movement for the removal of social disabilities, many caste Christians submitted to the dictates of church authorities. There were still remnants of segregation in some of the churches. But with the passing of the Untouchability Act, 1955, Archbishop Colas of Pondicherry issued a pastoral letter on 6 June 1955, drawing the attention of all Christians to the new enactment and directed them to shed all caste prejudices and practices. He made it clear in the pastoral letter that no separate enclosures would anymore be allowed for any group of Christians and that all would be treated alike with effect from 19 June 1955. The letter also contained a note of warning to the effect that erring Christians would not only be debarred from attending services in the church but also be open to penalisation for criminal offence under the laws of the land. Thus castism which plagued the Christian community for almost three centuries was finally removed from its body politic.

In matters of marriage and divorce, Christians were governed by the provisions of the French Civil Code. In all other matters, they were governed by Hindu law or to put it more precisely by Hindu law as modified by local customs, probably accepting that conversion to a new religion does not necessarily alter the Indian or Hindu way of life.

Christian marriages are solemnised in churches by the priest. Although marriages between close consanguineous relations are not allowed, exemptions are granted under special circumstances.

As for their mode of dress, the well-to-do and the educated men have taken to western style of dress like suit and tie with hat. Ladies still retain the Indian mode of dress. The style of living and the household manner of Christians resemble that of Europeans. Drinking is not very much looked down upon among Christian households. Even if it were so in some cases, it is purely on sentimental grounds. Inter-caste marriages among Christians could hardly be thought of in the olden days. Such marriages are more frequent nowadays. In most Christian houses, the centre of the *thavaram* is set apart for the *koodam* where the families gather for their daily prayers. Christians observe fasting during the Lent season.

Roman Catholics in Mahe mostly belong to the Mukkuva community of fishermen who are known as Kollakkar. They are said to have come from Quilon in South Travancore about two centuries ago. They are mainly occupied in fishing, rope-making and making fish-nets.⁹⁰ Christians follow the Makkathayam system. Marriages between children of two brothers or two sisters is not allowed. The dowry system is prevalent among Christians in Mahe. According to common law, girls above 16 years and boys above 18 years were permitted to marry. Widow marriage is generally allowed. As Catholics, marriages are solemnised in churches by the priest. The dead are buried. But otherwise their home life is very similar to that of Hindus.

There are very few Christians in Yanam. While their social life is very similar to that of Hindus, their religious customs do not differ much from their counterparts elsewhere. Like Hindus they celebrate the *seemantham* and observe the *sraddha*. Marriages are blessed by the priest in the church. Widows remove the *tali*, bangles, kum-kum and flowers and wear white saree. The dead body is washed, dressed and placed in a coffin and then buried in the cemetery after it is blessed by the priest. On the eleventh day, the house is cleaned and the close relatives visit the burial ground.

Muslims:

The Tamil speaking Mohammedans, known as Labbais or Sonakars, are said to be descendants of Arab traders who settled on the west coast around VIII century A.D. They soon spread into the interior and everywhere adopted the local language. Most of the Labbais in Karaikal region are known by the title of Marakkayar or Ravuthar. Those who settled near the coast carried the title of Marakkayar and those who settled in the interior of the country adopted the title of Ravuthar. Tamil is their mother-tongue. As for Muslims in Pondicherry, they are believed to be mostly descendants of those who came with the conquering armies from the north. A good number of them are mopplas who migrated to Pondicherry from Malabar to serve in the native army organised by the French to fight the British. Notable among them were Sheik Adbul Rahman and his brother Sheik Hassan whose valour and courage brought victory to the French in the battle of 17 August 1749.

The Labbais are a singularly industrious people. Their chief occupations are trade, the sea and fishing but there is hardly anything to which they will not turn their hands.

Some kind of caste rules are followed by some Mohammedans. The caste panchayat was found to exist among the muslims when some studies were carried by the Census authorities after the 1961 census. The panchayat consisted of five members who were elected from among Muslims in a particular locality. Once elected, they hold office for life. Besides helping to preserve caste solidarity, the panchayat accords permission for such social or communal functions like marriage, circumcision, puberty, etc. Except in the case of deaths, a prescribed fee is collected by the panchayat for all functions. It also looks after the maintenance of the mosque, and the Hazarat (priest) is paid every month from the panchayat funds. Islamic classes are arranged at the mosque for Muslim children. The panchayat funds are also utilized for repairing the burial ground of the community. One of its other chief functions is to arbitrate in disputes among members of the community.

Coming to property and inheritance, the Muslims follow the Makkathayam system. As per the règlement of 1769, they were permitted to execute a will in the presence of their Kazi or Mullah.

Although there are differences in the rituals followed by Muslims, their social life resembles very much that of Hindus. The only difference is that they recite passages from the Quran. Another point of difference is that their women unlike their Hindu counterparts do not appear in public, even during marriages.

Just as Hindus perform *valaikappu* the Muslims perform *sollikappu* on the seventh month. In Pondicherry the function is known as *sool seithal*. Unlike in the Hindu community, delivery entails pollution for 40 days. Among some groups, the naming ceremony takes place on the third day after birth. The Ustad names the child, after feeding the child with a spoon of milk. While naming the child, the Ustad chants *Natia* in its ears. Some Muslims also resort to tonsure and ear-boring ceremonies. At the age of five the children are sent to *Islamiya Maya Palli*.

Another ritual observed among Muslims is *sunnath* or circumcision. The fee charged is credited to the funds of the mosque. The well-to-do take their boys in procession after the ceremony. On the seventh day *poo poduthal* ceremony takes place. When a girl attains puberty, pollution is observed for seven or nine days. On the last day the girl is given a ceremonial oil bath and presented with new clothes. Like Hindus, Muslims call this ceremony as *manjal neer suttruthal*. The attainment of puberty by a Muslim girl is a significant event in her life cycle as it confers her with certain civil rights. Henceforth she becomes a shareholder of the property of her mother. However, certain restrictions are imposed on her movements and sometimes her education is stopped.

Marriage is preceded by the betrothal which is known as *seeni poduthal* or *mangan*. After *seeni poduthal*, the marriage may take place even after six months. Marriage ceremonies begin with a ceremonial bath given to the bride which is known as *nikkah thanneer uthal*. The marriage is celebrated only at night after eight o'clock as they calculate the auspicious days with reference to the phase and movements of the moon. On the wedding night, the groom is taken in procession in a car or a horse to the pallivasal where prayers are offered by the groom in the presence of the Mullah. Then, when the procession reaches the bride's place, the brother of the bride receives the groom and presents him with a ring in token of his willingness to give his sister in marriage to him. After prayers are offered by the Mullahs, the *thali* is tied by the groom's sister around the bride's neck. Before tying the *thali*, the terms between the parties are divulged before all. Then the groom is allowed to see the bride's face through a mirror. The marriage is then entered in the

Pallivasal register where even details of Mahur (bride price) are entered. Sometimes the Muslim priest 'Hazarat' is invited to officiate at the ceremony. Widow or widower remarriages take place only at nights. The ceremonies come to a close with *taluva*, a ceremony similar to *kappu kalaithal*. Consummation ceremony known as *kai izhaithu viduthal* takes place on the marriage night itself.

The system of dowry is prevalent among Muslims. Polygamy as well as widow marriages are common. Marital contracts with consanguineous relatives are also prevalent. It is customary for Muslims to marry one's paternal aunt's daughter or maternal uncle's daughter. A Muslim is allowed to have as many wives as he can afford to feed. The women are generally very loyal and very submissive to their husbands. The senior most exercises authority over the other ladies. Divorce known as *thalak* is prevalent in the community. It is to be noted that the Dissolution of Muslim Marriage Act, 1939 was extended to this Territory on 24 May 1968.

Muslims bury the dead after the *kaban iruthuthal* ceremony. Among Muslims a ceremony known as *jarat* somewhat similar to the *pal sadangu* of the Hindus takes place on the third day. The 39th day ceremony is marked by special ritual very similar to the Hindu custom of *kalasam*. While Hindus perform this on auspicious occasions, Muslims do it for death rituals. They call this ceremony as *ruhani*.

Muslims show a preference for striped lungies which is tucked on to the left. They sometimes wear a fez or silk scarf. They wear caps while going to the mosque or while celebrating Ramzan or Bakrid. The *purdah* system is slowly giving way especially among the educated. Their women are crazy for costly muslin dress with embroidery. *Keezzatti* is a kind of necklace used by women. They use more of porcelain vessels in their homes. The *panikkam* made of brass is used for spitting.

Muslims are given to many of the superstitious beliefs of Hindus. Some believe in evil spirits and use a *taveez* to be worn round the neck to prevent spirit intrusion.

Moharam, Ramzan and Bakrid are the most important festivals celebrated by all Muslims. They observe fast for forty days prior to Ramzan.

Muslims in Mahe are known as Mopplas. They are mostly merchants and fishermen. As businessmen they have longstanding business contacts with neighbouring countries like Sri Lanka. They followed the Marumakkathayam system until it was replaced by the Makkathayam in 1943. Widow marriages

are also allowed. After marriage, the old custom was for the wife to stay in her own house like Nair women. Nowadays, girls prefer to live with their husbands preferably in a separate house. Although the religion permits them to have four wives very few take as many. Marriages with a daughter of a maternal uncle or paternal aunt are allowed. Muslim women wear *mundu* and a longish blouse resembling the shirt. They cover their head with a square shaped veil called *thattam*. Even very young girls wear the *thattam* over their head more as a matter of habit than as a *purdah*. Muslims as a rule are non-vegetarians. Muslim women wear a great variety of ornaments such as necklace, ear-rings, bracelets and anklets. Besides the lobes, even the rim of their ear is bored into ten or more holes to wear ornaments. Those in Mahe sing the Mappilapattu like those in the adjoining districts of Kerala. These songs are composed in a language which is said to be a mixture of Arabic and Malayalam.

Muslims in Yanam are mostly merchants. They dress almost like Hindus and speak Telugu as well as Urdu at home. Although known for their religious fervour they have been living in harmony with their neighbours. In all religious ceremonies they follow the tenets of their religion while their social customs are not so different from that of their Hindu neighbours. Muslims bury the dead after a ceremonial wash. They follow the Muslim law of inheritance and the property is divided among the heirs of the deceased. Divorce is allowed by Muslim law. Muslims wear the fez cap while young boys put on shirts and shorts. While young girls wear *pavada* or *pyjama* and *kurtha*, Muslim women generally wear sarees. Men mostly put on silver rings. Women wear necklaces, *chandravankas* and bracelets. *Duppata* is carried by women observing *purdah*.

Renonçants :

All natives who came forward to abandon their Indian personal laws and be governed by the French Civil law are known as **renonçants**. A good number, mostly from the depressed classes, conscious of their own degradation, willingly opted to become French citizens so as to attain equality of status and position. They thus liberated themselves from the clutches of the age old laws and customs which had till then relegated them as untouchables. The **décret** of 21 September 1881 decreed that the **renonçants** should be regarded as French citizens in the true sense of the term with all its implications and the Court of Appeal had also held that their names should be included in the same list alongwith the Europeans. Considering the political and social advantages, quite a few among caste Hindus also opted to become **renonçants**. The **renonçants** were required to adopt a family name, the choice of which was not always so easy.

Many chose the names of the former French officials while others preferred the names of historical personages. Some preferred to choose typically Indian or Tamil names.⁹¹ Ponnoutamby poullé adopted the name 'La Porte' (which means the door) to signify the fact that renunciation had opened the door towards West.⁹²

He along with a team of followers worked for the uplift of Valangamougattars. As a social reformer he was the first to oppose castism in Pondicherry and did much to improve the lot of Valangamougattars. Hindus surrendering their personal laws ceased to be French subjects and became French citizens. As such, they were entitled to all rights the French citizens enjoyed in the colony and in France, particularly the right to be enrolled as a voter in the electoral rolls, while Hindus who fell under the category of subjects could exercise their voting rights only in India. This act of 'renonciation' could be made either at the time of marriage or at any other time. If done at the time of marriage, it was to be mentioned in the record drawn up by the Officer of the Registry. Otherwise, it may be received by the Officer of the Registry from the residence of the persons concerned as notification of births and deaths are received and entered in a register set for the purpose in all communes. This may be done either before a Justice of Peace assisted by his Registrar and two witnesses or before a notary. In the last two cases, a copy of the deed made before the notary or of the report of the Justice of Peace was forwarded to a competent officer of the Registry who entered it in the register set for the purpose. By this Act, the **renonçants**, their wives and their children came to be governed by the civil and political laws applicable to Frenchmen in the colonies. Moreover, from the date of renunciation, a **renonçant** was considered a co-owner 'of a joint estate or a partner in a joint partnership, subject to the provisions of article 1837 of the Civil Code. His property is to be bequeathed to his heirs as determined by French law without discrimination between citizens and subjects (article 745 to 768 of the Civil Code). Under the French law only monogamy was admitted among **renonçants**. As for marital age, article 144 of the Civil Code was applicable i.e., the minimum marital age was 18 years for males and 15 years for females.

Créoles/Métis :

The term 'Créole' stands for all those born to French parents in the colonies. In due course, however, it came to be applied to all born of mixed marriage i.e., between Europeans and natives. The progenies of such mixed marriages were otherwise known as Métis. Such persons were also called 'topas' or 'Gens de Chapeau' on account of their wearing the hat (topi). As early as in 1706 the new town of Pondicherry accounted for about 300 topas.

They were mostly French officials and soldiers who had married **créoles**. As some of those who contracted marriage with the natives were Portuguese settlers, they invariably adopted family names like Rozario, De Cruz, Pereira, De Costa, De Monte etc., which were of Portuguese origin, as many of these marriages were between Portuguese settlers in Pondicherry and natives. Most of them were Catholics. They were treated by the pure whites as second class citizens.

A report sent to the King on 25 July 1827 said that the **Métis** or **Topas** were "made up of a mixture of European and Indian blood. This population combined the vanity of the whiteman and the indolence of the Indian races and nothing could match its inactivity, if not its immorality." Since 1827 special attention was paid to the uplift of the community. Members of this community were given training and employment in the newly established **Ateliers de Charité**. Indigent families received cash doles from the **Comité de Bienfaisance**.

In due course they earned the good-will of the administration and secured high positions in the administration, judiciary and other technical cadres. Some joined the army and distinguished themselves in the World Wars I and II.

After merger a good number of them not only opted for French nationality, but went away and settled in France and other French colonies. The few who still remain here have established links with Anglo-Indians whose social background is very much similar except for the language barrier. The well-to-do among them live in clean and well maintained western type houses. Their affinity to the French is reflected in their food, dress, religion and culture. They prefer bread to rice, beef to mutton and foreign liquors. The **Société de Secours Mutuels des Créoles** takes care of those not so well off in the community.

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CHAPTER IV

AGRICULTURE AND IRRIGATION

I Land reclamation and Utilisation

Land utilisation :

Of the Territory's total area of 480 sq. km. as much as 46,822 hectares of land are accounted for in terms of land use. The region-wise area of the Territory according to the Survey of India and the village papers is given below :

(In hectares)

Details	Pondi-cherry	Karaikal	Mahe	Yanam	Territory
<i>Total geographical area according to :</i>					
1. Survey of India	29,000	16,100	900	2,000	48,000
2. Village papers	29,377	14,920	841	1,684	46,822*

The region-wise classification of land in the Territory (1970-71) is shown below :—

(In hectares)

Details	Pondi-cherry	Karaikal	Mahe	Yanam	Union Territory
<i>Land not available for cultivation :</i>					
1. Forests	Nil	Nil	Nil	Nil	Nil
2. Land put to non-agricultural uses	7,664	2,398	88	239	10,389
3. Barren and uncultivable lands	101	36	17	70	224

* Between 1956-57 and 1959-60, the total area of the Territory had slightly diminished from 46,867 ha. to 46,822 ha. This decrease in the area is said to have occurred as a result of soil erosion in Yanam region.

Details	Pondi- cherry	Karaikal	Mahe	Yanam	Union Territory
<i>Other uncultivated land excluding fallows:</i>					
4. Permanent pastures and other grazing lands ..	5	94	—	347	446
5. Land under miscellaneous tree crops and grove not included in the net area sown ..	1,276	637	2	74	1,989
6. Culturable waste ..	479	641	—	150	1,270
<i>Fallow land :</i>					
7. Other fallow lands ..	188	12	—	—	190
8. Current fallows ..	632	159	—	—	791
9. Net area sown ..	19,032	10,953	734	804	31,523
Total ..	29,377	14,920	841	1,684	46,822

It may be seen that as much as 67.3 per cent. of the total area of the Territory was under crops. The land put to non-agricultural uses accounted for 10,389 hectares constituting 22.2 per cent. of the total. Area under barren and uncultivable land represented 0.5 per cent. of the total area while permanent pastures and other grazing lands occupied 1.0 per cent. of the total area. In all 4.2 per cent. of the total area was under miscellaneous tree crops and groves not included in the net area sown, and the culturable waste accounted for 2.7 per cent. The current fallows represented 1.7 per cent. of the total area while the area under other fallows accounted for 0.4 per cent. of the total area. The region-wise percentage of net area sown to total cropped area is given in the following table :

Region	Percentage of net area sown to total area (970-71)	
Pondicherry	..	63.4
Karaikal	..	58.6
Mahe	..	86.2
Yanam	..	75.1

The details of land use between 1956-1976 are furnished below :

	1956-57	1959-60	1964-65	1969-70	1972-73	1974-76
1. Forests	.. Nil	Nil	Nil	Nil	Nil	Nil
2. Land not available for cultivation *	.. 9,325	8,997	10,040	10,667	10,952	11,023
3. Other uncultivated land excluding fallows †	4,476	4,696	4,655	3,883	3,202	3,029
4. Fallow lands ‡	.. 764	515	868	1,155	1,853	1,596
5. Net area sown	.. 32,302	32,614	31,259	31,112	30,815	31,174

The disappearance of forests in the Territory appears to be a recent phenomenon. François Martin who acquired Kalapet village, then famous for its timber from Nawab Dawood Khan in 1703, is reported to have used the wood from its forest for building houses in the town newly founded by him. The origin of ravines in Kalapet may perhaps be attributed to this process of depletion. Moreover, as late as in the year 1956-57 an area of 404 hectares was reported to be under forests in the Territory. A large part of this area was found to be in Yanam. However, since 1958-59, the Hand-books of Statistics do not indicate any area as being under forests.

* Land not available for cultivation includes land put to non-agricultural uses, besides barren and uncultivable land.

† Other uncultivated lands include all unculturable waste, permanent pastures and other grazing land, besides miscellaneous tree crops and groves not included in the net area sown.

‡ Fallow land includes also current fallows.

The table above also shows that land not available for cultivation had been increasing from year to year. This may be explained by the fact that the increase represent the requirements of housing, development and construction. But at the same time the extent of fallow land has also increased and has grown more than three times between 1959-60 and 1972-73. Another disturbing fact is that the extent of other uncultivated lands, which include permanent pastures and other grazing crops, has also sharply declined. This may have an adverse impact on the development of animal husbandry and horticulture in the Territory.

In 1965 the National Council for Applied Economic Research (N.C.A.E.R.), which placed the total area under fallows at 470 ha.*, pointed out that as irrigation facilities increased and as other improved techniques of cultivation were adopted, the area under fallows may shrink to less than 100 ha. by 1975-76. But according to the Statistical Hand-books the area under fallows increased from 515 ha. in 1960 to 1,853 ha. during 1972-73. The area under fallows, however, declined to 1,319 ha. during 1973-74 and subsequently increased sharply to 1,789 ha. during 1974-75.

Steps were taken to lease out the available fallow land to ex-servicemen and harijans etc. the details of which are furnished below :

No. of persons benefited		Total extent leased out		
		H.	A.	C.
76	..	30	75	72
88	..	35	61	36
164	..	66	37	08

As for fallow lands belonging to private land-owners, there is no enactment in force in the Territory, which would facilitate the government to take them over. The question of passing an order similar to the Madras Land Utilization Order has, however, been under the consideration of the Administration.

* According to the Statistical Hand-book, however, the area under fallows in 1965 was 868 ha.

The N.C.A.E.R. estimated the culturable waste land in 1965 at 850 ha. lying mainly in Pondicherry and Karaikal regions. ¹ The lands under this category lie scattered in small patches all over and belong to the Government, Municipalities and private land-owners. The first two agencies are said to own about 25 per cent of this. In the absence of any survey, it cannot be stated what the nature of this land is and how it could be reclaimed. Nevertheless the Council suggested that heavy tractors and bulldozers could be acquired, if necessary, by the Government to reclaim 600 ha. of culturable waste lands in the Territory. It was further estimated that the total cost of the scheme would amount to Rs. 15 lakhs. The N.C.A.E.R. also suggested that some of the area 'under culturable waste' and 'under culturable land' should be made pastures wherever there was such a possibility. ² As it is, there is not much culturable waste in the Territory which leaves little scope for bringing such lands under cultivation.

The question of giving lands to freedom fighters came up for consideration some years ago. This, however, brought to the fore the fact that there was not enough land for free distribution to the landless. Moreover, no proper data of the lands available for such distribution was then available. The Deputy Collectors (Revenue) were, therefore, directed to collect data of all culturable waste lands available with the Government.

The region-wise details of land utilisation on the basis of the settlement accounts introduced with effect from 1 July 1973 are given below :

To the nearest hectares

Lands		Pondi- cherry	Karaikal	Mahe	Yanam	Total
1. Forests	..	Nil	Nil	Nil	Nil	Nil
2. Lands under wet and dry cultivation	..	22,103	12,570	120	1,043	35,836
3. Lands put to non-agricultural uses	..	6,830	3,092	95	439	10,456
4. Barren and uncultivable lands		10	—	—	—	10
5. Grazing grounds	..	9	7	—	—	16
6. Cultivable waste lands	..	436	314	2	672	1,424
7. Garden lands	..	—	—	653	—	653
Total		29,388	15,983	870	2,154	48,395

It may be added that lands under miscellaneous tree crops and groves, as mentioned in the first statement, are included in lands under wet and dry cultivation in the above statement. The object of the settlement scheme was mainly to divide the wet and dry lands into groups and classes according to their productive capacity based on the nature and quality of their soil and the facilities available for cultivation and irrigation. Another objective of the settlement operation was to identify and restore all government lands.

Land reclamation and soil conservation:

Although it would be necessary to carry out a survey to identify all fallows and culturable wastes in any particular area before embarking on a result oriented reclamation and soil conservation programme, such a survey does not appear to have been undertaken in the Territory so far.

Soil conservation work was first taken up in the Territory only during the III Plan period and continued during the period of Annual Plans. Attempts at soil conservation in the Territory included measures to prevent soil erosion in easily erodable lands and to prevent fertile lands from becoming saline due to ingress of sea water. This kind of work seem to fall within the domain of the Public Works Department.

An estimated area of 240 ha. (600 acres) in Karaikal region was under water-logged condition. Efforts were made by the ryots themselves to bring an area of about 80 ha. (200 acres) under cultivation.

It was further decided to construct a protective bund along the sea coast and a regulator for protecting wet lands from submersion of salt water etc. Under this programme, irrigation was sought to be stabilised over an area of about 240 hectares. The construction of a coastal bund from Kil Vanjiyur to Chandrapadi covering a distance of 18 km. in Karaikal region was taken up in the middle of the III Five Year Plan. It was estimated that, once completed, the project would protect an area of about 3,280 ha. (8,200 acres). Of this, 2000 ha. (5000 acres) were to be stabilised and 1,280 ha. (3,200 acres) to be brought under cultivation.³

Under the soil conservation programme, the Public Works Department carried out stabilisation works to fill up the six-metre deep ravines near Dhanwantarinagar. The Public Works Department also took up the construction of regulators at Odaively and Mullodaj.⁴

Furnished below is a statement of plan provision for soil conservation and land reclamation works undertaken by the P.W.D., the actual expenditure incurred and details of works undertaken :

(Rs. in lakhs)		
Plan	Plan provision	Actual expenditure
III Plan 1961-66 ..	12.00	1.99
Annual Plan 1966-69 ..	5.15	5.21
IV Plan 1969-74 ..	17.00	12.53

The construction of a coastal bund from Kil Vanjiyur to Chandrapadi was the chief work carried out during the III Plan period. Protecting the coastal bund in different reaches at Karaikal, raising a casuarina plantation within the campus of the T.B. Sanatorium at Dhanwantarinagar, providing earthen bund to prevent sea-water eroding the land at Pudukkuppam near Manappattu village, providing check-dams near Dhanwantarinagar, protecting the road margin and regulating the flood waters at Dharmapuri village were the works carried out under the IV Plan.

Although in the beginning, soil conservation work was the sole concern of the P.W.D., the Directorate of Agriculture appears to have entered the arena in 1966. In order to implement the scheme vigorously departmental candidates were sent for training at Dehra Dun, Hazaribagh, and Ootacamund. On their return, soil and land use capability surveys were conducted. Under the IV Plan, an annual target of 303 ha. under contour bunding and 1,457 ha. under soil and land use survey was fixed. By April 1972 land use survey of the entire area of dry tracts in Pondicherry region was completed.

Details of localities in which land use surveys were conducted together with the area covered, classification of land, treatment required and the year during which the treatment was carried out are furnished in the following statement :

Localities in which land use surveys were carried out.	Area covered (in hectares) under land use survey	Classification.	Treatment required.	Treatment carried out.	Year on which work was carried out.
(1)	(2)	(3)	(4)	(5)	(6)
1. Kalapet— Laspettai— Gorimedu	1,040	Dry tract	Contour bunding	Contour bunding	1966-67 onwards

(1)	(2)	(3)	(4)	(5)	(6)
2. Mutturapalaiyam	240	„	„	„	1970-71 & 1971-72
3. Sedarappattu— Karasur— Tuttippattu area	720	„	„	„	1969-70
4. Thengathittu— Murungappakkam— Tavalakuppam ..	650	„	Prevention of sea- water intrusion and reclamation of saline and alkaline lands.	—	—
5. Bahur-Kirumam— bakkam area ..	492	„	—	—	—
6. Abhishekapakkam— Thimmanayacken- palayam	690	„	Reclamation of sal- ine and alkaline lands and land levelling.	Land levelling	1974-75
7. Suttukanni	160	„	„	—	—
8. Lingareddipalayam	250	„	Contour bunding	Contour bunding	1971-72

The progress of soil conservation work done under the aegis of the Directorate of Agriculture will be evident from the following statement :

(In hectares)

Year	Area surveyed	Area covered by soil conservation work
1966-67	240.00	210.00
1967-68	422.40	304.00
1968-69	524.00	267.84
1969-70	1,496.80	370.04
1970-71	1,463.00	305.00
1971-72	1,476.00	334.00
1972-73	1,444.00	127.00
1973-74	1,545.00	48.30

No soil conservation work has been carried out in Mahe and Yanam till the end of 1974.

The programme proposed for the Fifth Plan includes land levelling, water management practices such as channel lining (400 ha.), construction of percolation tanks (25 ha.) and water saving floors, stabilisation of ravines and protection of table lands (22 ha.), reclamation of saline, alkaline and water-logged lands (400 ha.), protection of stream banks and farm forestry. These measures are expected to cover both rainfed as well as irrigated lands.⁵

It is to be noted that no legislation has so far been introduced in the Territory to make it obligatory for farmers to resort to soil conservation measures. The work is being carried out departmentally with the consent of the land-owners. Although these measures benefit the land-owners they do not share the expenditure incurred for such works. Moreover, no evaluation study has been carried out either to assess the beneficial effects of these schemes or to find out the reason for the steady increase in the extent of fallow land in the Territory.

As for reclamation work, the Directorate of Agriculture acquired three bulldozers, two in 1969 and one in 1971, to help ryots level up and reclaim their culturable waste lands. The Directorate also acquired two crawler tractors and six tractors which were hired out to ryots for reclaiming and ploughing operations.

The progress of work done under land reclamation will be evident from the following statement :

(In hectares)

Year			Area reclaimed	Area ploughed
1966-67	..	..	18.00	110.00
1967-68	..	..	100.00	99.20
1968-69	..	..	20.40	624.60
1969-70	..	..	20.00	600.00
1970-71	..	..	66.70	1,317.00
1971-72	..	..	104.00	1,509.00
1972-73	..	..	93.50	1,923.00
1973-74	..	..	55.50	2,554.00

With the provision of better irrigation facilities and the adoption of improved techniques of cultivation and the implementation of land reclamation and conservation schemes, the extent of fallow land in the Territory was expected to decline. In fact the net area sown in the Territory was expected to go up from 32,617 ha. in 1961-62 to 33,695 in the year 1975-76. On the contrary, the extent of land lying fallow in the Territory seems to have doubled between 1959-60 and 69-70. However, no adequate explanation for the sharp increase in the extent of fallow land is available.

The Approach Paper to the Fifth Plan indicates that about 1,200 ha. (3,000 acres) of culturable waste and 760 ha. (1,900 acres) of current fallows will be reclaimed during the Fifth Plan period. ⁶

II. Irrigation

Introductory :

Pondicherry having been almost a cradle of civilisation for not less than two thousand years, it is not surprising that in the days of the Pallavas, there were special committees known as *eri variya perumakkal* for the management of irrigation tanks like Bahur.⁷ The construction of channels for feeding and distributing water from rivers and tanks respectively and the digging of large wells for purposes of irrigation was strictly under administrative control. Even so, enough encouragement was given to private individuals to construct works of irrigation. Each *brahmadeya* and *devadana* village received not only permission to construct works of irrigation free of charge, but also necessary implements and lands to aid such undertaking. The Brahmans, according to the Kasakkudi plates, were provided with *kolkalam* and *puludi padu*-iron implements and dry lands, for cutting out channels.

The inscriptions tell us a great deal about the care and attention bestowed on the maintenance of irrigation works during the Chola days. There is particular mention about the Bahur lake, the origin of which may be traced to the Pallava period from available evidence. The primary care of the village assemblies was to get the silt removed every year from the tanks under their control in time for them to secure the proper depth needed to store the full supply for the rest of the season before the rains set in. Often special endowments were created in relation to each tank to safeguard the irrigation interests from the neglect or

penury of village authorities. Even where, as in Bahur or Tirubhuvanai, the annual repairs were not provided for by specific endowments, a special cess, the *eri ayams*, earmarked for this purpose was collected from the ryots in the village, the rate in the instances mentioned being one *padakku* of grain per *ma* of cultivated land. The water rights attaching to particular plots of land were often enumerated on the occasion when they changed hands by sale or gift. When the natural levels were not favourable for the flow of water and it had to be lifted, picotahs and baskets were commonly employed for the purpose. In A.D. 1110, there is recorded a breach of the tank of Tirukkanji in a storm and the repairs effected to it by a local *Araiyan*, the repairs included the construction of a stone revetment to the banks (*kar padai*). Such examples bear clear evidence of the vivid realization by the people of the importance of irrigation and of their readiness to meet and solve irrigation problems in a reasonable spirit.⁸

The famous 'Ousteri', the largest irrigation lake in Villiyanur Commune, is said to have been built during the days of the Vijayanagar rulers.

Anandarangapillai is known to have spent money for the repair of tanks and canals which probably irrigated the lands that were leased out to him.

Caisses communes :

The French Administration had also realised the importance of agriculture and had provided irrigation facilities by constructing tanks, feeding channels and other diversion works in the territory. In fact many of the existing irrigation works were executed during the French period.

The *arrêté* of 18 July 1859 brought into existence the institution known as the '*Caisses communes*' which helped to bring together cultivators of one or more villages to undertake irrigation works jointly for their common benefit.⁹ An annual subscription being not less than two *fanams* and not more than three *fanams* per *kany* was collected from the members in proportion to the land owned by them. The funds were utilised for the maintenance of canals and for carrying out urgent works in times of emergency. Each '*Caisse commune*' was administered by a committee presided over by a representative of the Administration (normally the '*Regisseur*') besides four local land-owners paying at least three '*pagodas*' as tax. These four local land-owners were chosen by the '*Chef du Service des Contributions*' from two lists, one furnished by the Tahsildar and the other by the proprietors. Between 1859 and 1911, 80 'common funds' were constituted in the territory.

In 1911, the Administration reorganised the common funds with a view to making the land-owners free from administrative control and vesting the agricultural organisations with more powers. The **arrêté** of 14 June 1911 replaced the four-member committee with a Council of Administration (**conseil d'administration**) consisting of seven members elected for six years by the subscribers contributing at least a sum of Rs. 5 as tax. The subscription was also increased, the minimum being four *fanams* and the maximum being Re.1 per hectare. ¹⁰ The provisions of the **arrêté** of 14 June 1911 remained almost a dead letter. The '**Caisses communes**' obtained their subscription in accordance with the provisions of the **arrêté** of 9 October 1911 and functioned till 31 March 1975.

Syndicats Agricoles :

The decree of 10 September 1911 promulgated by the **arrêté** of 9 October 1911 constituted in the territory the famous institution called "**Syndicats Agricoles**," similar to those in France, for the better maintenance of irrigation works, canals, roads and to take effective measures against floods. ¹¹ The **Syndicats** were given 'corporate status' and empowered to raise loans and participate in public auctions purely for agricultural purposes. The '**Syndicats Agricoles**' were more or less similar to the '**Caisses communes**' although the maximum rate of subscription was not fixed in the case of **Syndicats**. In fact the '**Syndicats**' could even accept payment in kind from the subscribers. Some of the '**Caisses communes**' confined to the fertile areas were replaced by '**Syndicats Agricoles**'.

The areas of the various **syndicats** were determined according to the decision of 8 & 20 November and 14 December 1911. Out of about 8,000 hectares of irrigated lands, 5,000 hectares were grouped under **Caisses communes** and 2,000 hectares under **syndicats**. Less than 1,000 hectares were not provided with any kind of set-up. The **syndicats** functioned according to the terms and conditions laid down in the **décret** of 10 September 1911.

The **Caisses communes** and the **syndicats** were created with a view to maintaining and improving the auxiliary irrigation networks in the territory. The distribution of water was not among the duties of these bodies.

The working of these bodies was not always very satisfactory. It was felt that the deterioration of the auxiliary networks of irrigation was mainly due to the defect in the administrative set-up. In fact until 1937, the **Bureau**

des Contributions exercised control over the irrigation networks, the **Caisses communes** and **Syndicats** while **Service des Travaux Publics** was in charge of irrigation works. This division of responsibility hindered the smooth functioning of the irrigation works. The **Bureau des Contributions** was not competent enough to handle irrigation works executed by these bodies. It was also found that with the help of **Surveillant d'irrigation** some land owners managed to have their lands stealthily irrigated with water from government sources. This led to large-scale pilferage of water, leading to scarcity for vast tracts of land half way through cultivation, thereby affecting agricultural production as a whole. This prompted the Administration to investigate the whole matter with a view to ensuring proper and continuous supply of water to the irrigated land and framing precisely the regulations governing the distribution of water. ¹² As per the **arrêté** of 22 December 1937 the administrative control of supplying water for irrigation purposes was placed under the Public Works Department. The territory was then divided into '**circonscriptions**' and each **circonscription** was placed in charge of a '**Surveillant d'irrigation**'. Following this arrangement, the local **arrêté** of 20 August 1938 was brought forward to be in force provisionally for a period of one year during which time, the farmers were called upon to suggest modifications which were to be examined by a commission consisting of government officials and farmers. The Presidents of **Syndicats Agricoles** are in charge of distribution of water as prescribed by the **Surveillant d'irrigation** according to the Irrigation Register. Disputes over the orders of the Commission were left to the decision of the **Conseil du Contentieux Administratif**. ¹³ This led to the codification of the law governing the distribution of water in the territory. This code specified the position of embankments, breaches and the period of irrigation at various stages of cultivation.

The details of **Syndicats Agricoles** and **Caisses communes** in the territory as on 31 December 1948 are given below :

		Syndicats Agricoles	Caisses communes govern- ed by the arrêté of 18-7-1859	Caisses communes govern- ed by the arrêté of 14-6-1911
	(1)	(2)	(3)	(4)
1. Saram	1	—	—
2. Ozhukarai Mettuvaykkal..	1	—	—
3. Kanakan Eri	1	—	—

	(1)	(2)	(3)	(4)
4. Kurumbettai	—	1	—
5. Arasur	—	1	—
6. Tavalapet	—	1	—
7. Kuruvappanayakkanpalaiyam				—
8. Alankuppam	—	1	—
9. Ozhukarai Pallavaikal	1	—	—
10. Odiyambattu	—	—	1
11. Murungappakkam	1	—	—
12. Kommapakkam	1	—	—
13. Olandai	1	—	—
14. Sannadoulal	1	—	—
15. Sendanattam—Merkuvely	1	—	—
16. Poraiyur—Oussude	—	1	—
17. Gudappakkam	1	—	—
18. Tondamanattam-Pillaiyarkuppam		1	—	—
19. Sedarappattu	1	—	—
20. Karasur	—	1	—
21. Tuttippattu.	1	—	—
22. Katterikuppam	1	—	—
23. Suttukanni	1	—	—
24. Kakkalippattu	—	1	—
25. Tettambakkam	—	1	—

(1)		(2)	(3)	(4)
26. Kodattur	.. ..	—	1	—
27. Chettipet	.. ..	—	1	—
28. Manalippattu	.. ..	—	1	—
29. Kunichampattu	.. ..	—	1	—
30. Mannadipattu	.. ..	—	1	—
31. Tirukkanur	.. ..	—	1	—
32. Sombattu	.. ..	—	1	—
33. Vadanur	.. ..	—	1	—
34. Sorappattu	.. ..	—	—	1
35. Vambupattu	.. ..	—	1	—
36. Sanyasikuppam	.. ..	1	—	—
37. Tirubhuvanai	.. ..	—	—	1
38. Tiruvandarkovil	.. ..	—	—	1
39. Madagadippattu	.. ..	—	—	1
40. Nallur	.. ..	—	1	—
41. Madukkarai	.. ..	1	—	—
42. Suramangalam	.. ..	1	—	—
43. Kariyamanikkam	.. ..	1	—	—
44. Nettappakkam	.. ..	1	—	—
45. Erippakkam	.. ..	1	—	—
46. Pandacholanallur	.. ..	1	—	—
47. Sivarantagam	.. ..	1	—	—
48. Pangur	.. ..	—	1	—

	(1)	(2)	(3)	(4)
49. Arugur	—	1	—
50. Sattamangalam	1	—	—
51. Embalam	1	—	—
52. Korkkadu	1	—	—
53. Mangalam	—	—	1
54. Abhishekapakkam (Tavalakuppam)		1	—	—
55. Karkilambakkam	1	—	—
56. Perungalur	—	—	—
57. Kirumambakkam	—	—	1
58. Seliyamedu	—	—	1
59. Kudiiruppupalayam	—	—	1
60. Bahur	—	—	—
61. Manappattu-Uchchimedu		—	—	1
62. Kil Parikkalpattu	—	—	1
63. Mel Parikkalpattu	—	—	1
64. Irulansandi	—	—	1
65. Arachchikkuppam	1	—	—
66. Kuruvinnattam	—	—	1
67. Karaiyamputtur	1	—	—
68. Kaduvanur	—	1	—
69. Manamedu	—	1	—
70. Panayadikuppam	—	1	—
Total	32	24	14

The following **Syndicats Agricoles** were constituted in Karaikal region during 1965-1966 :

1. Akkaravattam	12. Kil Kasakkudi	23. Tirunallar
2. Oduturai	13. Varichchikudi	24. Ambagarattur
3. Niravi	14. Kottuchcheri	25. Settur
4. Vilidiyur	15. Poovam	26. Polagam
5. Kakamuli	16. Mupattankudi	27. Vanjiyur
6. Uliapattu	17. Serumavilangai	28. Melaiyur
7. Talatteruvu	18. Nallazhandur	29. Kilayur
8. Pudutturai	19. Elcankudi	30. Tiruvettakudi
9. Patchur	20. Sellur	31. Nedungadu
10. Keezhavely	21. Sorakkudi	
11. Kovilpattu	22. Takkalur	

From the year 1965-66, the minimum annual subscription for membership in **Syndicats Agricoles** and **Caisses communes** was raised from four *fanams* per ha. to Rs. 2 per ha. and the maximum rate from Rs. 2 to Rs. 5.

Following the introduction of the panchayat system of administration in the Territory, all functions connected with minor irrigation works hitherto attended to by the **Syndicats Agricoles** or **Caisses communes** were transferred to the Commune Panchayats/Municipal Councils with effect from 1 April 1975.

Organisation du Service d'irrigation par pompage :

It was realised even long ago that if *manavary* lands were assured of irrigation, agricultural production in the territory would increase manifold. As early as in 1937, it was estimated that about 2,20,00,000 cubic metres of water were required per annum for irrigation in Pondicherry region. ¹⁴ The borings undertaken between 1936-1938 in and around Nettappakkam, Tirubhuvanai, Abhishekappakkam and Bahur revealed that about 5000 hectares of *manavary* lands could be additionally brought under irrigation. But bore-wells could be popularised only in areas where the ground-water resources were in abundance. Moreover, the cost of borings was so high that it was not ultimately profitable for farmers. Further,

the farmers had to borrow money at exorbitant rates of interest. Hence the Administration itself came forward to extend loan facilities to the farmers to meet cultivation expenses. About the same time, the Administration took steps to organise an autonomous body known as '**Organisation du Service d'Irrigation par pompage**' and passed the *arrêté* of 18 March 1938 for the purpose.¹⁵ Water was supplied to the farmers at cost depending upon the state and mode of cultivation. The requests of land-owners for water were scrutinised by the Chief of Public Works Department. The canals were to be constructed from the pumping station to the lands by the concerned land-owners. The distribution of water was to be regulated to each portion of land by turn.

This organisation irrigated an ayacut of approximately 45 acres. The bore-well pump house at Kalitirtakuppam was, however, constructed even before the formation of this body. The other pumping stations at Muttirapalaiyam, Ellupillaichavadi, Muttialupettai, Gorimedu, Bahur, Pattanikokadai, Madukkarai, Villianur, Kirapalaiyam and Ariyankuppam were meant only for water supply.

Incidence of irrigation :

In 1961 the total area irrigated by all sources was placed at 24,237 ha. The area under irrigation accounted for 74 per cent of the net area sown in the Territory. It was 67 per cent for Pondicherry region and 95 per cent for Karaikal region*.

By 1965-66 the net irrigated area was expected to go up to 26,000 ha.¹⁶ The extent of area under irrigation was not expected to go up further than this, because many of the plan schemes were intended only to stabilise irrigation facilities rather than to extend them to fresh lands. The National Council for Applied Economic Research pointed out that the potential for minor irrigation was fairly high and that it deserved greater attention. The programme of irrigation suggested by the Council in 1965 envisaged the net irrigated area to increase from 24,237 ha. in 1961-62 to 29,200 ha. by 1975-76.¹⁷

* It was 41 per cent for Tamil Nadu as a whole, 38 per cent in Thanjavur District and 49 per cent in South Arcot District.

The following table shows the area irrigated by various sources and the percentage of area covered by each source for the Territory as a whole during 1970-71. 18

Sources	Net area irrigated 1970-71 (in hectares)	Percentage of area irrigated from each source to net area irrigated
Canals	11,143	42.04
Tanks	5,516	20.81
Tube-wells	9,716	36.65
Ordinary wells	—	—
Other sources	133	0.50
Total	26,508	100.00

The following table gives the sources of irrigation and area irrigated in each region during 1970-71 :

(In hectares)

Regions	Net area irrigated by					Percentage of net area irri- gated to net area sown
	Canals	Tanks	Tube wells	Other sources	Total	
Pondicherry ..	168	5,516	9,709	91	15,484	81.4
Karaikal ..	10,439	—	7	42	10,488	95.8
Mahe ..	—	—	—	—	—	—
Yanam ..	536	—	—	—	536	66.7
	11,143	5,516	9,716	133	26,508	84.1

Thus during 1970-71 the net area under different sources of irrigation was 26,508 hectares being 84.1 per cent. of the net area sown. In between 1965 and 1971, the net area irrigated in the Territory seems to have registered an increase of only 508 ha. The proportion of net area irrigated was the

highest in Karaikal region being 95.8 per cent. while in Pondicherry and Yanam it was 81.4 per cent. and 66.7 per cent. respectively. In Mahe region the sown area is entirely dependent on monsoon rain.

According to the above table, 11,143 hectares or 42.04 per cent. of the net area are irrigated by canals comprising 10,439 hectares in Karaikal region and 536 hectares in Yanam region.

It may be evident that canals are the principal sources of irrigation in Karaikal and Yanam. Tanks are important sources of irrigation in Pondicherry region where 5,516 hectares are irrigated by tanks. Ordinary wells and other sources of irrigation consisting of ponds, spring channels, etc. play a minor role as sources of irrigation. As many as 9,709 hectares are irrigated by tube-wells and bore-wells in the region. Other sources of irrigation include spring channels and ponds.

Details of area under different sources of irrigation between 1956-57 and 1975-76 are furnished in the following statement:

Sources	1956-57	1957-58	1960-61	1963-64	1965-66
Canals	.. 10,780	11,297	11,295	11,266	11,066
Tanks	.. 5,497	5,430	6,228	6,328	5,464
Tube-wells	.. —	2,974	4,494	7,697	8,249
Ordinary wells	.. 6,678*	1,948	1,280	71	21
Other sources †	.. 736	464	492	46	96
Total area irrigated	.. 23,691	22,113	23,789	25,408	24,896
Total area irrigated more than once	.. 9,495	9,742	10,940	14,179	13,995
Gross area irrigated	.. 33,186	31,855	34,729	39,587	38,891

* Includes area irrigated by tube-wells also.

† Spring channels, ponds, etc. are included in other sources

1968-69	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
10,659	11,143	11,026	11,048	10,949	10,852	10,886
2,742	5,516	5,490	4,835	5,048	1,548	2,954
11,830	9,716	9,611	10,404	10,164	13,179	11,831
7	—	1	1	1	1	—
61	133	194	218	234	236	245
25,299	26,508	26,322	26,506	26,396	25,816	25,916
11,488	13,305	15,648	14,279	14,392	14,020	14,251
36,787	39,813	41,970	40,785	40,788	39,836	40,167

The area irrigated by such sources as spring channels and ponds has steadily declined during the years to reach 46 ha. in 1963-64. The extent of area irrigated by tube-wells has increased considerably from 2,974 in 1957-58 to 11,830 in 1968-69. Since then the area irrigated by tube-wells has declined steadily. The area irrigated by ordinary wells has dramatically declined from 1948 ha. in 1957-58 to one ha. in 1971-72. The area irrigated by tanks and canals has remained almost steady. All in all, the total area provided with irrigation facilities has increased from 23,691 in 1956-57 to 26,322 ha. in 1971-72 registering an increase of less than 3,000 ha.*

Anicuts/Regulators :

Vidur anicut : The scheme for building a dam across river Gingee near Vidur in South Arcot District was taken up for execution in March 1958 under the Second Five Year Plan. The work was completed and declared open formally on 28 December 1959.¹⁹ Its water was first made available for irrigation only in 1963. Built at a total cost of Rs. 88.94 lakhs, the expenditure was shared between Pondicherry Administration and the Government of Tamil Nadu in the ratio of 5:1, the contribution amounting to Rs. 27.8 lakhs. The work which was executed by the Public Works Department of Tamil Nadu, continues to be maintained by them. The annual maintenance expenditure is also shared by both the Governments in the same ratio.

* This analysis is based on the data furnished by the Statistical Hand-books published by the Bureau of Statistics, Pondicherry.

Suttukanni anicut : This anicut is built further down along the same river in the village called Suttukanni. This is a diversion anicut built by the French Administration nearly a century ago to head-off the water flowing in the river and divert the same into the Suttukanni channel. The crest level of the anicut is 17.110 m. and its length is 398.025 m.

Pillaiyarkuppam anicut : The Pilliyarkuppam anicut constructed nearly a century ago is also located across Varaha Nadi about 3.2 km. downstream of the Suttukanni anicut. This serves as a diversion anicut diverting water into the Villiyanur channel.

Vikravandi anicut : Built across Gingee river, this anicut is situated in the Vikravandi village of South Arcot District. The anicut is, however, maintained by the Pondicherry Administration, the cost being shared between Tamil Nadu and Pondicherry in the ratio of 2:1.

Sornavur anicut : As far as Pondicherry is concerned, Ponnaiyar is the most important source of water to the Bangaru vaykkal which feeds the second biggest irrigation tank viz., the Bahur tank. The flow in the river used to be diverted into the Bangaru vaykkal by means of a *korambu*, the construction of which was governed by the Convention of 15 June 1910 entered into between the then British Government and the French Government. According to this Convention a *korambu* used to be formed across Ponnaiyar for diverting the spring flows and freshes into Bangaru vaykkal for feeding Bahur tank and supplying other tanks in the direct sluices of the vaykkal. The full supply depth in the rear of the old head sluice was fixed as 1.675 m. above the floor of vents upon the tar mark, marked in the rear wing wall during 1872. The arrangement functioned well except during high intensity of flood flows in the river. The *korambu* used to get either over topped or get breached, thereby silting up the mouth of the off take channel. After subsidence of flood the channel would be silt cleared and the *korambu* formed again to draw off supplies in the next freshes period. Thus ryots had to incur expenditure from time to time. The maintenance of the *korambu* was left to the care of the P.W.D. Matters took a turn for the worse with the construction of Krishnagiri Dam and Sathanur Reservoir in the upper reaches of the river. Due to impounding of water in Krishnagiri and Sathanur reservoirs, the flow on the downstream fell considerably in quantity and duration. Consequently the flow in the Bangaru vaykkal also dwindled. Hence, the construction of a *pucca* anicut instead of the mud *korambu* became imperative.

The Pondicherry Administration took the initiative in the matter and approached the Government of Tamil Nadu for the construction of an anicut across Ponnaiyar in Sornavur. The Government of Tamil Nadu agreed to the construction of an anicut across Pennaiyar near Sornavur above Bangaru vaykkal sluice to divert the flow into the said vaykkal. * The construction work was executed by the Tamil Nadu P.W.D., by virtue of the location of the anicut in Sornavur village which is in South Arcot District.

The Ponnaiyar is said to have a catchment area of 12,94,592 ha. (5,057 sq. miles) around the Sornavur anicut site. However, it was anticipated that by this project, irrigation to an area of about 1,875 hectares in the region will be stabilised. As much as 21 per cent. of the ayacut served by the anicut lies in Tamil Nadu. Nevertheless, the entire cost of construction of the anicut amounting to Rs. 37 lakhs was met by the Pondicherry Administration. This was insisted, because it was argued that the ryots of Tamil Nadu could draw the water by means of the *korambu*, without having a *pucca* masonry diversion work.

Kilur anicut : The Kilur anicut built across Kuduvaaiyar during the French period is located north of Kilur village. The water headed off by the anicut finds its way through the Sivarantagam feeding channel and Sattamangalam feeding channel.

Mangalam anicut : This is a diversion anicut built across Kuduvaaiyar during the French period at Kil Sathamangalam in Villiyanur Commune. The anicut consists of a masonry wall with crest shutters.

Tirukkanji anicut : Also built during the French period, this is the last diversion work across Kuduvaaiyar. This anicut does not feed any tank but its water is baled or used for irrigating about 64 ha.

Idayar anicut : This is a diversion anicut built across Malatar near Idayar village in South Arcot District.

* G.O.Ms. No. 2955 dated, 2-11-1962 and No. 2762 (P.W.D.) dated, 24-11-66.

Sellanjeri anicut : Sellanjeri anicut is built across Malatar near Thennambakkam village in Cuddalore Taluk. This anicut was damaged by flood waters in November 1964. It was then reconstructed by the Tamil Nadu, P.W.D., the cost being shared between the two Governments in the ratio of the ayacut benefited by this anicut. This anicut serves an ayacut of 389.6 ha. in Sellanjeri and Pudukkadai villages in Cuddalore Taluk and Karkilambakkam in Pondicherry region. As the anicut serves both Tamil Nadu and Pondicherry as per the convention and agreement entered into between the two Governments, the maintenance cost is met by each Government in proportion to the ayacut irrigated in each of its territory.

Kumaramangalam regulator : Kumaramangalam regulator is the third diversion work across Malatar. The regulator is built below the road bridge connecting Bahur with Villiyanur about 1.5 km. south of Karkilambakkam. The nine-vent arrangement at the tail reach of the channel lets out any excess flow in the channel into the Malatar.

Canal irrigation :

Pondicherry region : The rivers that flow across this region do not serve as direct sources of irrigation except to a limited extent. As such, the canal system is chiefly designed to feed the large number of irrigation tanks in the region. The tanks which are not covered by the net-work of canals are mostly rainfed.

The Vidur main canal, which takes off from the saddle dam beyond the left flank of Vidur through two sluices, was designed for a full supply discharge of 75 cusec. at its head. The channel is expected to feed a total ayacut of 1,280 ha. of which 400 ha. are in Pondicherry region. The entire ayacut lies north of the river. The total length of the canal is 18.382 km. of which the last 1.225 km. run across Pondicherry territory.

The Suttukanni channel takes off almost at the point where the Suttukanni anicut spans across River Gingee. The flow in the channel is regulated by means of a head sluice. This channel feeds Tondamanattam Velleri and Usteri, both in Villiyanur Commune.

The Villiyanur channel taking off from Pillaiyarkuppam anicut provides direct irrigation to an area of about 200 ha. in Villiyanur and Ozhukarai Communes and feeds Olandai and Murungappakkam tanks. It runs a total distance of 11 km. At Pathukannu it crosses the surplus course of Usteri tank by means of a syphon arrangement and from there it runs parallel to the Villiyanur—Gudappakkam road. The Villiyanur channel subdivides itself into three branches about two km. upstream of Olandai tank viz. (i) Marappu channel towards south, (ii) Eripatrai channel towards north and (iii) Ottakondam towards east. The Marappu and Eripatrai channels directly serve the needs of irrigation. Perumal patrai channel, which branches off from Ottakondam supply channel, feeds the Olandai tank. The surplus water from the tanks falls back into Ottakondam channel ultimately emptying into Uppar drain. The Adiceya Pillai vaykkal branches off from the Villiyanur channel at Arumattapuram and feeds the Murungappakkam tank. The surplus water of the tank flows into Ariyankuppam river.

The Vikravandy channel which takes off at the right flank of the anicut runs towards east covering a total distance of about 16 km. feeding a number of tanks in Tamil Nadu and Pondicherry. All the eight tanks fed by this channel are situated in Mannadipattu Commune.

The Sivarantagam feeding channel and Sattamangalam feeding channel take off from the southern flank of Kilur anicut. While the Sivarantagam channel feeds exclusively Sivarantagam tank, Sattamangalam channel, running parallel towards south, feeds Mel Sattamangalam tank, Kil Sattamangalam tank, Vannan eri, Vakran eri and Sitheri of Embalam and Korkkadu tanks, besides feeding one tank in Tamil Nadu.

The Kizhagaram vaykkal takes off from the northern flank of Kuduvaayar and runs parallel to Kuduvaayar feeding Tirukkanji tank and Kizhagaram tank.

The Idayar feeding channel taking off from Malatar (Idayar anicut) feeds Nettappakkam tank, Pandacholanallur tank, Madukkarai tank and Kariyamanikkam tank. The Manappanthangal of Karkilambakkam is fed by Malatar directly.

The Karkilambakkam channel feeds the Karkilambakkam tank (ayacut 62.2 ha.) and partly the Abhishekapakkam tank with water of Malatar from Sellenjeri anicut.

The Athuvaykkal takes off from the left flank of Kumaramangalam regulator and runs parallel to Malattar to feed Abhishekapakkam tank, the third largest in the region.

Bangara vaykkal taking off from the left flank of Sornavur anicut runs as a contour channel covering a distance of 13 km. The channel receives surplus water from the left side outlet of the Kuttiyankuppam channel which takes off from Ponnaiyar on its left above the Sornavur anicut. The vaykkal area also receives run-off from a catchment of 7,52,128 ha. on the left above the Sornavur anicut site. The Bangara vaykkal has an ayacut of 1,911.2 ha. in Pondicherry and 510 ha. in South Arcot District. It feeds Bahur lake, Vannan eri of Karaiyamputtur, Manamedu tank, Kaduvanur tank, Ottanthangal tank, Nirnayanpet tank, Pinnachchikkuppam tank, Pirivupalayam tank and four tanks in Tamil Nadu through seven sluices located on the right bank of the channel at different reaches.

Apart from Bangara vaykkal, there are two more channels taking off from Ponnaiyar namely (i) Kuttiankuppam channel and (ii) Sitheri Athuvaykkal. Kuttiyankuppam channel is located about 2.75 km. upstream of the Bangara vaykkal. The flow in the river is diverted into the channel through a *korambu* built across the river. There is a head sluice at the off-take point of the channel to regulate the flow into the channel. The channel feeds Panaiyadi-kuppam tank, Panaiyadikuppam Sitherithangal and Karaiyamputtur Odaperi in Pondicherry area, besides feeding other tanks in Tamil Nadu area.

Sitheri Athuvaykkal takes off from the northern flank of the Ponnaiyar about 2 km. east of Kuruvinnattam. An earthen *korambu* used to be built across the river to divert the flow of the river into the channel. This channel, besides supplying water to a small tank near Bahur called Sitheri of Bahur, supplements supply of water to Arachchikkuppam, Mel Parikkalpattu Kil Parikkalpattu, Manappattu, Uchchimedu and Kirumambakkam tanks which are also fed by Bahur tank.

Other irrigation channels worth mentioning are Chinna Chellangal which feeds Madagadippattu, Nallur, Tirubhuvanai and Tiruvandarkovil tanks, and Periya Chellangal which feeds Suramangalam and Eripakkam tanks. Chinna Chellangal also is an offspring of Ponnaiyar. It flows through Tamil Nadu area before entering Pondicherry territory.

Karaikal region : In the early days agriculturists in Karaikal region had to depend on inundation following floods in Kaveri or local rainfall. Construction of dams and regulators across Kaveri and its tributaries subsequently contributed to the system being controlled to some extent resulting in a steady increase in the area irrigated.

From the Grand Anicut site onwards, the Kaveri divides and subdivides itself into a number of distributaries which provide water for irrigation in the deltaic region. The main branches of the Kaveri below the Grand Anicut are the Kodamurutti, Arasalar, Virasolan and Vikramanar. In their tail reaches they break again into a number of distributaries and some of them flow across Karaikal region before entering the Bay of Bengal. Out of the above four branches, Arasalar and its branches flow across Karaikal. The waters of Kodamurutti and Virasolan also meet the needs of irrigation to some extent. The irrigation in Karaikal is exclusively carried out by canals.

The flow of Arasalar, which marks the dividing line between Tirunallar and Karaikal Communes in the north and Niravi Commune in the south, provides irrigation facilities for an area of 108.80 ha. in Karaikal region. The total length of the river as it runs in Karaikal region is 11.97 km.

Nular is purely an irrigation supply carrier which receives its supply from Arasalar. Its total length is 12.81 km. It irrigates an area of 3,586 ha in Karaikal region. The proposal of the Tamil Nadu Government to replace the bed-dam at Manamgudy with a regulator, it is feared, would adversely affect the irrigation facilities of Karaikal. Instead, the Pondicherry Administration had suggested the construction of a notched type weir in the place.

Vanjiar is also an irrigation-cum-drainage carrier and is fed by Arasalar. It runs a distance of 8.694 km. and irrigates an extent of 1,130 ha. in Karaikal region.

Nattar is solely an irrigation supply carrier fed by Arasalar. It traverses a distance of 11.2 km. and irrigates an area of 1,507.20 ha. in Karaikal region.

Nandalar is an irrigation-cum-drainage carrier receiving its supply from Virasolan. It covers a distance of 15.15 km. and feeds an ayacut of 1,904.80 ha. in Karaikal region before crossing over to Tamil Nadu.

Fed by Kodamurutti, the Pravadayana runs through T.R. Pattinam Commune on the south for a distance of 3.93 km. This is an irrigation-cum-drainage carrier and has a registered ayacut of 240.80 ha.

Tirumalarajanar is also an irrigation-cum-drainage carrier receiving its supply from Kodamurutti. It runs as a dividing line between Niravi and T.R. Pattinam Communes for a distance of 10.98 km. and feeds an ayacut of 2,255.20 ha. Two channels viz. T.R. Pattinam channel and Niravi channel, taking off from Manampettai regulator, serve the ayacut in T.R. Pattinam and Niravi Communes of Karaikal region. Even though these channels serve only Karaikal region, their maintenance is under the control of Tamil Nadu by virtue of the location of the channels in Tamil Nadu limit.

The total area irrigated by these rivers is 10,692.80 ha. out of which 6,317.6 ha. fall under the first crop and 4,375.2 ha. under the second crop. Except for the main rivers and channels, the other irrigation works in the region are maintained by municipalities and *Syndicats Agricoles*. The irrigation system in the region is reported to be not properly maintained due to paucity of funds. It must further be noted that the irrigation in the region was designed for conditions when the Mettur Dam was not in existence. These factors have contributed to scarcity of water required for irrigation. The Administration has formulated a scheme for modernising the irrigation system in Karaikal region at an estimated cost of Rs. 66.00 lakhs.

Mahe region : There are no irrigation works in Mahe region. The extent of wet land is only 120 hectares, which is entirely rainfed.

Recently, however, the Kerala Government had decided to build an anicut at Pazhassi about 39 km. to the east of Mahe. The Pondicherry Administration requested the Kerala Government to extend the irrigation facilities to Chalakara area as well. The Administration proposed to meet a portion of the construction cost. Chalakara area in Mahe region, at present, does not have any irrigation facilities.

Yanam region : Irrigation facilities are much less in Yanam compared to Pondicherry and Karaikal. Initially irrigation facilities were provided for 226 ha. for the first crop and about 80 ha. for the second crop. Water for these lands was supplied from Gautami Godavari river by means of a channel

called French Kaluva built under an agreement entered in 1949 between the then French Government and the Government of India. After merger steps were taken to provide irrigation facilities for about 560 ha. of dry land in Yanam by providing a new irrigation channel.

The new Adivipolam channel was designed to take off from the tail end of Tallarevu south channel and at the starting point of Nilapalli channel on the right side and to run in a south-westerly direction. After running for a distance of 800 m. it was to join the new flood tank of Gautami Godavari river at a distance of about 400 m. and then to run for another 5.63 km. along the north side of the flood tank. The total length of the channel is estimated to be 6.44 km. The work was taken up for execution by the Andhra Pradesh P.W.D. as a deposit work in 1964 and was completed in 1966. Water was let into the channel in June 1966.

Well irrigation :

Wells owned by individual cultivators form an important source of irrigation, especially in Pondicherry region. Irrigation from wells used to be carried out mostly manually. After merger as a matter of policy, ordinary wells were sought to be converted into tube-wells or fitted with pump sets. As electricity became easily available it was pointed out that it should be taken advantage of for energising the wells. Moreover, with the growing popularity of pump sets, there was demand for more wells. The question of deepening the wells also assumed some importance as water level showed signs of receding due to lignite mining in Neyveli.

In 1965 the National Council for Applied Economic Research suggested that the area under well irrigation in the Territory could be substantially increased, if the Government undertook to do the boring work on payment basis or provided loans to cultivators for buying pump sets. The Council also suggested the installation of a few filter point tube-wells in Karaikal. It was pointed out that by these measures the area under well irrigation could be increased to 11,000 ha. by 1975 i.e. the maximum limit to which the area could be expanded. It was also pointed out that it would require an investment of the order of Rs. 75 lakhs over a 10-year period. The Council further stressed the need for carrying out a survey of underground water resources before finalising the details of the programme.²⁰

Until 1965, the Government had not taken any direct interest in increasing the area under well irrigation. Although no precise estimate has so far been made, the potential for well irrigation seems to be substantial. In 1957 as many as 1948 ha. of land were irrigated by ordinary wells and 2,974 ha. by tube-wells. Since then, there had been a gradual decline in the area irrigated by ordinary wells which reached the point of zero in 1970. Simultaneously the area under tube-well irrigation had increased from 2,974 ha. in 1957 to 11,830 ha. in 1969. The area under well irrigation in the Territory has shown a declining tendency since then.

It may also be recalled that during 1968-69, under the Drought Relief Programme, 12 bore-wells and 21 open wells were sunk at the following places to provide additional water for irrigation and drinking purposes.²¹

Open wells

Place	No.	Place	No.
1. Anandapuram	1	11. Samipillaithottam	1
2. Sivarantagam	1	12. Puduppettai	1
3. Kuruvappanayakkanpalaiyam	1	13. Kanakachettikulam	1
4. Athuvaykkalpet	1	14. Periya Calapet	2
5. Tattanchavadi	1	15. Puduppettai	1
6. Konerikuppam	1	16. Karuvadikkuppam	1
7. Kil Agaram	1	17. Commandanmedu	1
8. Pudukkuppam	1	18. Pudukkuppam	1
9. Abhishekapakkam	1	19. Pillaiyarkuppam	1
10. Thimmanayakenpalayam	1	20. Vinayagampet	1

Bore-wells

1. Uruvaiyar	..	1	7. Madagadippattu	..	1
2. Sendanattam	..	1	8. Andipalayam (Kalithirthalkuppam)		1
3. Sultanpettai	..	1	9. Madagadippattupalayam	..	1
4. Mannadipattu	..	1	10. Lingareddipalayam	..	1
5. Sanjeevirayanpet	..	1	11. Kudiirupupalayam	..	1
6. Delasupet	..	1	12. Ranganathampet	..	1

Cultivators themselves have sunk tube-wells and bore-wells for irrigation purposes and such private wells numbered about 4,000 in March 1974.

Under the Bore-well Scheme operated by the Directorate of Agriculture, power drills, air compressors and a few hand bore sets are hired out to the ryots for testing and sinking bore-wells. One of the hand bore sets is permanently stationed at Karaikal to serve the needs of Karaikal region.

Tank irrigation :

Pondicherry region : Next to wells, tanks form the most important source of irrigation in the territory. The total extent of fresh water in the territory is estimated at 1,347 ha. The two major water bodies of Usteri and Bahur Eri alone cover an area of 8.30 ha. The remaining area is distributed among 87 irrigation tanks and 612 spring ponds.²² Many more spring ponds are said to be under the control of municipalities.

Usteri is the biggest irrigation tank in Pondicherry region which probably was built during the Vijayanagar days.²³ The lake receives the greatest part of its water from River Gingee through the Suttukanni channel which takes off from the Suttukanni anicut across Varaha Nadi nearly 11.27 km. away from the lake. The tank also has a free catchment area of 1,024 ha. (4 sq. miles) and an intercepted catchment area of 512 ha. (2 sq. miles).

The lake, situated near the village bearing the same name, lies about 12 km. from Pondicherry towards west. The eastern and northern portions of the tank *poramboke* lie in Tamil Nadu. The fore-shore of the tank lies in Kadapperikuppam, Kondimedu and Poothurai villages of South Arcot District. The western side is well protected by a bund of rough stone packings. On the eastern side is a high ground protected with revetments to almost the entire length. There are no bunds on the northern side of the fore-shore. The distance around the outer periphery of the lake is nearly 12 km. The inlet arrangement for letting in water into the tank consists of a 10-vented inlet regulator of size 1.52 m. x 15.33 m. (5'0" x 50'3") each with sill level at 10.754 m. The tank bund on the southern side carries the Valudavur road.

The total registered ayacut of the tank is 1,549.20 ha. under the first crop and 1,465.20 ha. under the second crop. Gudappakkam, Sendanattam, Villiyanur, Poraiyur, Oussudu, Odiyambattu and Ozhukarai in Pondicherry region and Perambai village in South Arcot District are benefited by this lake. The water is supplied through seven sluices situated along the southern bund of the tank.

The surplus arrangements of the tank consist of a 15 vented surplus regulator just above the inlet regulator. The sill level of the surplus regulator is 12 m. (39.19 ft.) and the size of vent is 1.45 m. x 2.06 m. (4'9" x 6'9") each. The lake had a nine vented surplus escape in the southern bund which was closed. In addition to the above arrangements, there are two more regulators situated along the Suttukanni channel itself viz. (i) Valudavur four vented regulator and (ii) Thopple Madai, both of which are to be operated only when the water level in the channel goes above the danger mark.

The proposal to increase the capacity of the tank from its present 540 Mcft. by an additional 107 Mcft. to benefit an additional area of 599.2 ha. under third crop estimated to cost Rs. 18.66 lakhs was cleared and the work was started on 5 February 1971. An extent of 114 ha. of culturable land in the fore-shore area of the tank in Poothurai and Kadaperikuppam village (Tamil Nadu) will be submerged by more than 0.32 m. (1'01"). It is proposed to raise the fore-shore land level by 0.305 m. (1'00") thereby maintain the *status quo*. Some of the fore-shore land owners are agreeable to this proposal in principle although they want their lands to be raised by 0.61 m. to 0.91 m. (2' to 3'). Some ryots in Poothurai village are not agreeable to this proposal. This will also require the concurrence of the Tamil Nadu Government.

Bahur Eri in Bahur Commune is the second largest and perhaps the oldest irrigation lake in the region. The lake must have been in existence even before the Chola period. There are some others who believe that it must have been built only during the Chola period. In any case, we are certain that the bed of the lake was deepened and the level banks were raised during the Chola days. Three of the inscriptions of Kannaradeva, the Rashtrakuta king (X century), in Bahur temple, mention the lake as '*Kadambu Eri*' or '*Peria Eri*'. *Peria Eri* means 'the big lake' which naturally must have come to apply because of its size. The lake is said to be called '*Kadambu Eri*' because of the presence of *Kadambu* trees in the river bed. An inscription of Rajaraja tells us that a tax in the form of paddy was collected for the maintenance of the lake. There was also a Council of Elders known as '*Eri Varya Perumakkal*' whose responsibility was to look after the maintenance of the lake and the proper distribution of its water. 24

The tank is fed by the feeding channel called *Bangara vaykkal* which takes off from Sornavur anicut about 16.8 km. from the tank. Surrounded by bunds on all sides, the tank has no independent catchment except the water spread area. It has a surplus escape of the *calingulah* type. A portion of the tank, including the bund and fore-shore, lies in Tamil Nadu.

The present capacity of the tank is 193.47 Mcft. It serves an ayacut of 1,740 ha. (1,664 ha. in Pondicherry and 76 ha. in Tamil Nadu). Actually the ayacut registered under Bahur tank is only 384 ha. but the tank feeds twelve other tanks whose ayacut also may indirectly be treated as under Bahur tank. Water from the tank is supplied by means of eight sluices situated around the periphery of the tank bund. In Bahur, work for strengthening the tank bund and improvement to L.F. *calingulah* was taken up. The works for strengthening and raising the banks for the revised F.T.L. condition was completed during the IV plan period. Regarding reclamation of fore-shore lands in Tamil Nadu, the Tamil Nadu P.W.D. has made a request to this Administration to wait for 5 years to watch the performance of the new regime of the *Bangara vaykkal* on the plea that the Sornavur anicut had been recently constructed. The actual F.T.L. conditions are expected to be achieved as soon as concurrence from Tamil Nadu Government is received.

There was a proposal to increase the capacity of the tank to 245.45 Mcft. and thereby bring an additional area of 249.6 ha. under irrigation. The Government of Tamil Nadu had suggested that the performance of the newly constructed Sornavur anicut across Ponnaiyar should be studied for five years before embarking on any new scheme. As for carrying out improvement to the Bangara vaykkal, it must be noted that while the right bank lies in this Territory the left bank lies in Tamil Nadu. The channel feeds ayacuts both in Tamil Nadu and Pondicherry. Hence the cost of improvement is to be shared between the two Governments in the ratio of ayacuts benefited.

During 1969-70 an investigation of 70 tanks was conducted following which improvements were carried out to 23 tanks in the region. The details of tanks improved are furnished below :

- | | |
|----------------------------|-----------------------------|
| 1. Alankuppam tank | 13. Kirumambakkam tank |
| 2. Sedarappattu sitheri | 14. Kaduvanur tank |
| 3. Sedarappattu periya eri | 15. Manamedu tank |
| 4. Karasur tank | 16. Karaiyamputtur tank |
| 5. Kankan eri | 17. Panaiyadikuppam tank |
| 6. Olandai tank | 18. Panaiyadikuppam sitheri |
| 7. Murungappakkam tank | 19. Nettappakkam tank |
| 8. Kunichampattu tank | 20. Madukkarai tank |
| 9. Tirukkanur periya eri | 21. Suramangalam tank |
| 10. Tirukkanur chinna eri. | 22. Nallur tank |
| 11. Perungalur chinneri | 23. Kil Sattamangalam tank |
| 12. Korkkadu tank | |

The details of the irrigation networks are furnished below :

Rivers	Anicuts	Canals	Ayacut fed by canals	Tanks fed by canals	Ayacut fed by tanks	Villages benefited
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Gingee	(i) Vidur anicut	Vidur Main canal	400 ha. in Pondicherry			Pudukkuppam Suttukanni Katterikuppam Tettambakkam
	(ii) Suttukanni anicut	Suttukanni channel		1. Tondamanattam Velleri 2. Usteri 3. Puduppalaiyam tank (fed by Palla vaykkal of Usteri)	50.8 ha. 1,549.2 ha. 22.4 ha.	Tondamanattam Gudappakkam Sendanattam Oussudu Villiyannur Poraiyur Sultanpettai Odiyambattu Ozhukarai in Pondicherry. Perambai in Tamil Nadu.
	(iii.) Pillayar-kuppam anicut	Villiyannur channel Adiceya Pillai vaykkal Perumal patrai channel	200 ha.	4. Murungapakkam 5. Olandai tank	157.2 ha. 71.6 ha.	Villiyannur Odiyambattu Manaveli Olandai Murungapakkam Arumattapuram

(1)	(2)	(3)	(4)	(5)	(6)	(7)
(iv)	Vikravandi anicut	Vikravandi channel		6. Kunichampattu pudu eri 7. Kunichampattu pazaya eri 8. Tirukkanur periya eri 9. Tirukkanur chinna eri 10. Chettipet tank 11. Kodattur tank 12. Kakalipattu tank	75.2 ha. 30.8 ha. 62.4 ha. 26.0 ha. 36.0 ha. 28.4 ha. 10.0 ha.	Kunichampattu Kunichampattu Tirukkanur Tirukkanur Chettipet Kodattur Kakalipattu
		Pambai Ar (tributary)		13. Vadanur tank	54.0 ha.	
Ponnaiyar (i)	Kilayur anicut	Sivaramtagam feeding channel Sattamangalam feeding channel		14. Sivaramtagam tank 15. Mel Sattamangalam tank 16. Kil Sattamangalam tank 17. Korkkadu tank 18. Embalam Vannan eri 19. Embalam Vakran eri 20. Embalam sitheri	58.0 ha. 3.6 ha. 82.4 ha. 194.0 ha. 48.0 ha. 84.8 ha. 48.0 ha.	Sivaramtagam Mel Sattamangalam Kil Sattamangalam Korkkadu Embalam Pudukkuppam Nattamedu

(1)	(2)	(3)	(4)	(5)	(6)	(7)
(ii)	Mangalam anicut	Kil Agaram vaykkal		21. Tirukkanji tank 22. Kil Agaram tank	78.0 ha. 36.0 ha.	Tirukkanji Kil Agaram
(iii)	Tirukkanji anicut		64 ha.	Direct irrigation		Tirukkanji
(iv)	Idayar anicut	Idayar channel		23. Nettappakkam tank 24. Pandacholanallur tank 25. Madukkarai tank 26. Kariyamanikkam tank	60.0 ha. 138.0 ha. 93.2 ha. 46.0 ha.	Nettappakkam Pandacholanallur Madukkarai Kariyamanikkam
(v)	Sellenjeri anicut	Karkilambakkam channel		27. Karkilambakkam tank 28. Abhishekapakkam tank (partly)	63.2 ha.	Karkilambakkam Abhishekapakkam Tavalakuppam Thimmanayaken-palayam
(vi)	Kumaramangalam regulator	Athuvaykkal feeding channel		Abhishekapakkam tank (partly)	165.2 ha.	Abhishekapakkam Thimmanayaken-palayam Tavalakuppam

(1)	(2)	(3)	(4)	(5)	(6)	(7)
(vii)	Sornavur anicut	<i>Bangara vaykkal</i>				
		29. Karaiyamputtur Vannan eri			32.0 ha.	Karaiyamputtur
		30. Manamedu tank			70.4 ha.	Manamedu
		31. Kaduvannur tank			28.8 ha.	Kaduvannur
		32. Bahur tank			384.0 ha.	Irulansandi, Kuruvi- nattam and Bahur
		33. Ottanthangal tank				
		34. Nirnayampet tank				
		35. Pinnachchikkuppam tank				
		36. Pirivupalaiyam tank				
		Tanks fed by Bahur eri				
		37. Irulansandi tank			133.6 ha.	Irulansandi
		38. Kuruvinattam tank			73.2 ha.	Kuruvinattam
		39. Arachchikkuppam tank			30.0 ha.	Arachchikkuppam
		40. Mel Parikkal- pattu tank			47.2 ha.	Mel Parikkalpattu
		41. Kil Parikkalpattu tank			89.2 ha.	Kil Parikkalpattu
		42. Manappattu tank			144.0 ha.	Manappattu
		43. Uchchimedu tank			73.2 ha.	Uchchimedu
		44. Kirumambakkam tank			312.0 ha.	Kirumambakkam

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				45. Aranganur tank	125.2 ha.	Aranganur
				46. Seliyamedu tank	128.0 ha.	Seliyamedu
				47. Adingapattu tank	50.0 ha.	Adingapattu
				48. Kudiirupupalayam tank	45.2 ha.	Kudiirupupalayam
		<i>Kuttiyankuppam channel</i>		49. Panaiyadiikuppam periya eri		
				50. Panaiyadiikuppam sitheri	76.4 ha.	Panaiyadiikuppam
				51. Karaiyamputtur odaperi	12.0 ha.	Panaiyadiikuppam
					92.4 ha.	Karaiyamputtur
						Bahur
		<i>Sitheri Athuvaykkal</i>		Supplements		
				39. Arachchikkuppam tank		Arachchikkuppam
				40. Mel Parikkalpattu tank		Mel Parikkalpattu
				41. Kil Parikkalpattu tank		Kil Parikkalpattu
				42. Manappattu tank		Manappattu
				43. Uchchimedu tank		Kannikoil
				44. Kirumambakkam tank		Uchchimedu
						Koravali (medu)
						Kirumambakkam and Pillayarkuppam.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	<i>Chinna Chellangal</i>					
				52. Madagadippattu tank	62.0 ha.	Madagadippattu
				53. Nallur tank	52.0 ha.	Nallur
				54. Tiruvandarkovil tank		
				55. Tirubhuvanai tank	78.0 ha.	Tiruvandarkovil Tirubhuvanai
	<i>Periya Chellangal</i>			56. Suramangalam tank	10.0 ha.	Suramangalam
				57. Eripakkam tank	23.2 ha.	Eripakkam
	<i>Malattar</i> (tributary)			58. Manapanthangal of Karkilambakkam	8.0 ha.	
				Rainfed tanks		
				1. Karasur tank	23.6 ha.	Karasur
				2. Alankuppam tank	22.0 ha.	Alankuppam
				3. Kanakan eri	78.0 ha.	Ozhukarai
				4. Sorappattu pudu eri	10.0 ha.	Sorappattu, Vinayagampet
				5. Sanyasikuppam tank	9.2 ha.	Sanyasikuppam

(1)	(2)	(3)	(4)	(5)	(6)	(7)
6.	Pidarikuppam tank				3.6 ha.	Pidarikuppam
7.	Vambupattu tank				38.0 ha.	Vambupattu
8.	Pangur tank				30.8 ha.	Pangur
9.	Arugur tank				20.0 ha.	Arugur
10.	Perungalur periya eri				14.4 ha.	Perungalur, Tanatha-medu
11.	Mangalam tank				30.8 ha.	Mangalam
12.	Sombattu tank				28.8 ha.	Sombattu
13.	Manalippattu tank				7.6 ha.	Manalippattu
14.	Suttukanni periya eri				68.0 ha.	Suttukanni Pudukkuppam
15.	Suttukanni otteri				52.4 ha.	Suttukanni
16.	Tettambakkam tank				11.2 ha.	Tettambakkam
17.	Katterikuppam tank				72.4 ha.	Katteri and Kuppam
18.	Katteri pazhaya thangal				14.8 ha.	Katteri

(1)	(2)	(3)	(4)	(5)	(6)	(7)
				19. Katteri puthu thangal	26.4 ha.	Katteri
				20. Sedarappattu periya eri	29.6 ha.	Sedarappattu
				21. Sedarappattu sitheri	15.6 ha.	Sedarappattu
				22. Tuttipattu tank	20.0 ha.	Tuttipattu
				23. Sorappattu periya eri	110.0 ha.	
				24. Perungalur sinneri	14.2 ha.	
				25. Uruvaiyar tank	34.0 ha.	
				26. Mannadipattu tank	12.0 ha.	
				27. Kilur tank	5.6 ha.	
				28. Kadapperi of Tondamanattam	27.2 ha.	
				29. Kuppam tank	111.2 ha.	
	(Karaikal)	Pravadayanar	2,255.2 ha.			
		Arasalar	108.8 ha.			
		Nular	3586.0 ha.			
		Vanjiar	1,130.0 ha.			
		Nandalar	1,904.8 ha.			

Problems of irrigation :

There are several agencies attending to the problems of irrigation in the Territory without any clear-cut demarcation of the spheres of action. The 'Irrigation Wing' of the P.W.D. is the oldest agency looking after the subject. The 'Syndicats Agricoles' and the 'Caisses Communes' functioned under its auspices until they were abolished in March 1975. Until then, except for the distribution channels which were maintained by the 'Syndicats Agricoles', the other irrigation works were maintained by the Irrigation Wing of the Public Works Department. These functions have now been taken over by the concerned Municipal Councils and Commune Panchayat Councils. A large number of spring ponds are said to be under the control of the Municipalities. After merger, the Directorate of Agriculture also entered the field. The Municipalities, Commune Panchayats and the Community Development Blocks are the other agencies which undertake minor irrigation works in areas under their respective jurisdiction.

It may be relevant to mention here that a proposal was mooted by the Local Administration Department to transfer all irrigation works having an ayacut of less than 80 ha. (200 acres) to the local bodies as in Tamil Nadu. In the meanwhile the Tamil Nadu Government reduced the ayacut limit of such irrigation works from 80 ha. (200 acres) to 10 ha. (25 acres). This proposal was, however, not accepted by the Government and the P.W.D. continues to be responsible for all irrigation works in the Territory.

Moreover, no single agency is exclusively placed in charge of the exploitation of sub-soil water in the Territory. This has resulted in indiscriminate digging of tube-wells, which appears to restrict the balanced flow of sub-soil water.

Most of the irrigation tanks and ponds in Pondicherry region are fed by rivers and irrigation channels. The other tanks depend on the monsoon for their water. Naturally the water area decreases considerably during summer. Moreover, the tanks gather silt and unless the silt is removed from time to time the tank capacity gets diminished. The fact that emerges is that the expansion of irrigation facilities in the Territory should be mainly through tube-wells and by desilting the large number of tanks.

In 1965 the N.C.A.E.R., which found many of the wells silted, felt that it was very necessary to undertake desilting operations on a 10-year phased programme, primarily to stabilise irrigation and also to increase the irrigated area for a second and a third crop. It was felt that while desilting work of small tanks and ponds could be done manually, earth moving equipments will be necessary for such operations in the larger tanks.

The problem in Karaikal is different. It has an ayacut of mainly 27,000 ha. Being situated at the tail end of the Kaveri deltaic region, there is always the difficulty to meet the full requirements of irrigation in the region. Moreover, the canal system of Karaikal was designed for conditions when the Mettur Dam was not in existence. These factors have led to scarcity of water in Karaikal region. The water released from the Mettur Dam by June or July reaches Karaikal after a week. Normally water becomes available by the middle of July. With the help of this water, a short term paddy crop (kuruvai) of three months' duration is taken up.

As for Karaikal, the Council pointed out that the area under crops could be doubled if water were made available by the beginning of June to enable seedlings to be raised for 20 days. Crops on a larger area could then be grown as soon as water from the canal was released. To achieve this, the Council suggested that a few filter point tube-wells could be installed to help raise seedlings in the region. Irrigation by such wells was favoured because the requisite quantity of water would be available at the required time. The Council also recommended cheap credit facilities to ryots for taking up the construction of tube-wells. The N.C.A.E.R. suggested that there was also the possibility of lift irrigation by pumping water from Pravadayananar to a main pumping channel from where water could be supplied for irrigation. This, it was pointed out, would convert nearly 200 ha. of dry land into wet land. The Council also pointed out that there was the possibility of having another lift irrigation scheme in Kottuchcheri Commune.

Another aspect to be kept in view was that the irrigation schemes should be so designed as to make available water for multiple cropping. Several schemes which provide for the construction of bed-dams, raising of bunds and revetments of rivers and channels, construction of culverts, etc. could be implemented with a view to preventing wastage of water and improving the efficiency of the irrigation system.

N.C.A.E.R. or the word 'Council' stands for the 'National Council for Applied Economic Research'.

Yet another problem is that most of the rivers flowing in the Territory are inter-state rivers and as such any improvement works to these rivers at the upstream level in the neighbouring states affect the irrigation potentials of this region considerably. Although Inter-State Rules and Regulations have been framed to regulate the release of such water, these rules may call for periodic review to protect the riparian rights of this Territory.

Examining the problem of irrigation in the Territory, the National Council for Applied Economic Research pointed out as early as 1965 that as elsewhere, in irrigation too, the planning work in this Territory was hindered by lack of survey of technical schemes. The Council, therefore, suggested that such a survey should be completed as early as possible.²⁵

In any case, a full-fledged Irrigation Division was formed in April 1973, in order to take up detailed scientific surveys and investigations for formulation and planning major irrigation, flood control and soil conservation projects in the Territory. The Division has been called upon to carry out hydrological surveys accompanied by studies on gauging, model tests, etc. as part of a comprehensive study of the Territory's irrigation system.

There are no special problems as far as Mahe is concerned. In respect of Yanam, however, the irrigation system there can be improved by stabilising the existing ayacut and extending irrigation facilities to the high level lands.

Progress under Plans :

It is to be noted that under 'Plan' there are separate provisions for irrigation under two different sectors viz. under 'Agriculture' and 'Power and Irrigation'.

Details of plan provisions and expenditure under the 'Power and Irrigation' sector which is operated by the Irrigation Wing of the P.W.D. are furnished below :

(Rs. in lakhs)

Plan period			Outlay	Expenditure
II Plan	..	..	22.50	25.31
III Plan	..	..	10.35	12.74
Annual Plans (66-69)	..	..	30.00	17.93
IV Plan	..	..	45.00	44.37

Under minor irrigation * the construction of a regulator-cum-bridge across Bahur tank surplus course at Pannittittu and a bund around Thengathittu was taken up under the II Plan. This, however, spilled over to the III Plan. Besides this, the Adivipolam Channel Scheme for Yanam was also included in the III Plan. The Vanjiyur Lift Irrigation Scheme, the first of its kind in the Territory, was taken up for implementation in 1965 and completed in 1969. Under the scheme, water is lifted to a height of 2.44 m. (8') from Pravadayanar and pumped into a main channel, 1.101 km. (3,610 ft.) long with branch channels. The water thus obtained is utilised for the irrigation of about 134.80 ha. (337 acres) in Vanjiyur village located at a higher level.

Under medium irrigation, the Vidur Anicut Scheme was the only scheme included in the II Plan. It was taken up as a joint venture, the Pondicherry Administration sharing an expenditure of Rs. 25.31 lakhs. The construction was taken up by the Tamil Nadu Government and completed in January 1960. The share of this Administration by then increased to Rs. 27.79 lakhs. The scheme was expected to stabilise irrigation on an additional ayacut of 410 ha. (1,000 acres). Subsequently anyway, it transpired that only 312 ha. (780 acres) could be stabilised.

Outlay under irrigation in the III Plan was less than in the first two plans. An allocation of Rs. 10.35 lakhs was made in the III Plan for medium irrigation schemes. The actual expenditure amounted to Rs. 12.74 lakhs. The construction of the Sornavur Anicut which was expected to stabilise irrigation in about 2,084 ha. was also taken up. The construction of the Sornavur Anicut at a cost of Rs. 37.00 lakhs was completed in 1968. Schemes were also formulated for the desilting of Usteri and Bahur Eri in the Territory.

The scheme for tapping sub-soil water for summer irrigation and for raising a third crop in Karaikal was taken up in 1965-66 and under the scheme, ten filter points were sunk. These were intended to facilitate early raising of kharif crop.

* Works costing less than Rs. 10 lakhs are taken as minor irrigation works and works costing more than Rs. 10 lakhs are called medium irrigation works. Such works as silt clearance, repairs to sluices, improvements to canals, construction of regulators, dividing walls, protection works with revetment blocks, desilting-cum- reclamation come under minor irrigation.

Under the V Plan, it was proposed to construct an anicut across Ponnaiyar just below the off take of Sitheri Athuvaykkal. This was expected to stabilise an ayacut measuring 2,064 hectares commanded by 23 tanks. Some improvements to the Vidur scheme were also to be taken up during the V Plan.

The Public Works Department has also formulated a scheme for modernising the irrigation system in Karaikal region at an estimated cost of Rs. 66.00 lakhs during the V Plan. The total V Plan outlay for irrigation works to be executed by the P.W.D. amounted to Rs. 126.50 lakhs.

A perusal of the plan documents reveals that under 'agricultural programmes' the following provisions have been made for minor irrigation under the different plans :

(Rs. in lakhs)

Plan period	Outlay	Expenditure
II Plan ..	18.38	4.66
III Plan ..	12.18	12.15
Annual Plans (66-69) ..	25.28	26.16
IV Plan ..	53.00	68.11

Out of Rs. 18.38 lakhs allotted originally for the II Plan only Rs. 4.66 lakhs could be spent. In all, an ayacut of about 22,000 ha. (55,000 acres) is reported to have been stabilised by improving the existing tanks, channels, wells, etc.

As against the III Plan outlay of Rs. 12.18 lakhs for minor irrigation, a sum of Rs. 12.15 lakhs or 99.75 per cent. was spent. Schemes such as improvement of canals, construction of regulators, dividing walls, revetments, desilting of tanks, etc. were taken up. 26

During the Annual Plan period (1966-69) one power drill (1966-67) and one air-compressor (1967-68) were purchased under the Bore-Well Scheme to help ryots sink deep tube-wells.

During the IV Plan period, more power drills, hand bore sets and air compressors were acquired to help the ryots. Loans were advanced for sinking wells and installing pump sets. Although such assistance was originally made available to ryots for raising all crops, later it was confined only to those raising cash crops like sugar-cane, cotton, etc. in Pondicherry region and all crops in Karaikal region.

The V Plan outlay for irrigation works under the agricultural sector amounted to Rs. 28.00 lakhs.

Ground Water Unit :

The question of setting up a Ground Water Unit in this Territory under the aegis of the Directorate of Agriculture was mooted in 1971. Details of a scheme were forwarded to the Government of India for approval shortly thereafter. The Planning Commission, however, suggested that preliminary investigations in the various regions could be carried out by the Central Ground Water Board itself.²⁷ Accordingly, since May 1972, the Central Ground Water Board sunk deep bore-wells in Pondicherry and Karaikal regions as an experimental measure to assess the scope for the exploitation of ground water. Exploratory bore-wells were dug at Mulakkulam, Manappattu, Karasur, Madagadippattu and Agaram. The Ground Water Board was successful in locating copious amount of water in the wells drilled at all these places. More wells were dug at Madukkarai and Kalapet.

The Ground Water Unit (State) set up in the last year of the IV Plan carried out hydrological investigations in order to study ground water potentialities in Pondicherry region so as to advise ryots on spacing their wells, etc.

Irrigation cess :

As on date, no water rate, betterment levy or irrigation cess is being collected from farmers in the Territory. In 1973 the Administration introduced the Pondicherry Irrigation (Levy of Betterment Contribution) Bill, 1973 with a view to recovering betterment contributions from land-owners whose lands stood benefited either by the construction or expansion of irrigation or drainage works. The Pondicherry Irrigation Cess Bill, 1972 which sought to empower Government to levy irrigation cess for water used or supplied from Government sources for irrigation of lands other than wet lands was also introduced the same year. Both the bills, which stood referred to the Select Committee, lapsed with the dissolution of the Assembly in 1974. In the meanwhile, the *Syndicats Agricoles* and *Caisses Communes* continued to collect a betterment levy which was utilised for the maintenance of field bothies and for payment to the *kambakarans*.

Irrigation Development Board:

A 15-member Irrigation Development Board was constituted in 1974 to advise the P.W.D. on all matters relating to irrigation works in the Territory. The Board which is expected to meet once in two or three months is also vested with supervisory powers.²⁸ The Director of Agriculture, however, is not represented in the Board.

III. Agriculture

Viewed in terms of output and employment, agriculture is the most important activity in the Territory. In 1961, this sector produced 28.6 per cent of the Territory's income and employed 44 per cent of the workers. In 1971 there were in all 62,934 workers engaged in agricultural activities either as cultivators or agricultural labourers. This forms 44.34 per cent of the total working force showing an increase of agricultural workers in the Territory. The net value of agricultural output in 1961 was Rs. 754 per hectare of gross cropped area and Rs. 574 per agricultural worker. This rate of productivity was possible due to superior cropping pattern, dominated by high value crops such as rice, sugar-cane, ground-nut, coconut, etc. However, taking the total population of the Territory, the per capita income from agriculture amounted to only Rs. 95 as pressure of population was high and the per capita cultivated land was low.* The net sown area per capita amounted to only 0.09 ha. and the net area sown per agricultural worker amounted to only 0.535 hectare.** Thus in the agricultural sector, the main limiting factors are institutional which include lack of land reforms and the small size of the holdings. 29

The following table furnishes data of total workers, agricultural workers, per capita net area sown and density of agricultural workers per 100 hectares of net sown area for the four regions of the Territory according to the 1971 census :

Area	Total workers	Agricultural workers (cultivators & agricultural labourers)	% of agricultural workers to total workers	Net area sown in hectares	Per capita net sown area in hectares		Density of agricultural workers per 1000 hectares of net sown a
					Total population	Agricultural workers	
Pondicherry	.. 1,05,203	47,125	44.80	19,032	0.056	0.404	248
Karaikal	.. 29,405	14,419	49.03	10,953	0.109	0.760	132
Mahe	.. 4,843	513	10.59	734	0.032	1.431	70
Yanam	.. 2,474	877	35.45	804	0.097	1.567	109
Territory	.. 1,41,925	62,934	44.34	31,523	0.067	0.501	200

* Rs. 146 in Tamil Nadu.

** The comparable figure for Tamil Nadu was 0.13 ha.

It could be seen that Pondicherry has the highest density of 248 agricultural workers per 100 hectares of net area sown followed by Karaikal where the density is 132. The high density of agricultural workers in Pondicherry region may be attributed to the diversified cropping pattern of the region and higher proportion of double cropped area to net area sown as compared to the other regions. Mahe has the lowest density of agricultural workers (70) while in Yanam it works out to 109 workers per 100 hectares of net sown area.

Karaikal region, which is predominantly agricultural in character, has the highest proportion of agricultural workers to total workers viz. 49.03 per cent. followed by Pondicherry with 44.80 per cent. In Mahe, where cultivation is not an important occupation, only 10.59 per cent. of the working force are agricultural workers. Although the per capita net area sown is the lowest in Mahe due to very high density of population, the net sown area per agricultural worker to the maximum (1.737 ha.) due to the low percentage of agricultural workers to total workers. In Yanam the net area sown per agricultural worker works out to 1.396 ha.

Season and crops :

The Union Territory is benefited both by south-west monsoon and the north-east monsoon. Naturally, the pattern of agricultural operations is determined by the south-west monsoon which lasts from June to September and the north-east monsoon which lasts from October to December. This is the most important season which greatly influences the kharif crops. Pondicherry, Karaikal and Yanam regions, situated on the east coast, are mainly benefited by this monsoon. More than 50 per cent. of the annual rainfall in these regions is accounted for by this monsoon. The cultivation of a second crop of paddy is very much influenced by the rainfall during this season. The cold weather season which normally lasts from January to February is mostly dry. From March to May is the hot weather season. Mahe region, situated in the west coast, receives the major portion of its annual rainfall during the south-west monsoon. Given below is a statement of different crops and the names of the seasons along with the period of sowing and harvesting :

Region	Crop	Nature of crop	Period of	
			sowing	harvesting
(1)	(2)	(3)	(4)	(5)
Pondicherry	Paddy	Kuruvai (Sornavari)	May-July	Aug.-Oct.
		Samba Navarai (Kar)	Aug.-Nov. Feb-March	Dec.-March May-June
	Ragi	Irrigated (Iravai)	Jan.-Feb.	April-May
	Ragi	Irrigated	May-June	Sept.-Oct.
	Cambu	Dry	June-July	Sept.-Oct.
	Cholam	Dry	July-Aug.	Nov.-Dec.
	Ground-nut	Rainfed	July-Aug.	Nov.-Dec.
	Ground-nut	Irrigated	Jan.-Feb.	May-June
	Gingelly	Dry	Jan.-Feb.	March-April
	Redgram	Dry	July-Aug.	Nov.-Dec.
	Blackgram	Dry	Jan.-Feb.	April-May
	Greengram	Dry	Jan.-Feb.	April-May
	Sugar-cane	Irrigated	Oct.-April	Nov.-May
	Onion	Samba	Sept.-Oct.	March-April
		Kar	April-May	July-Aug.
	Cotton	Irrigated	Jan.-March	July-Sept.
		Rainfed	Sept.-Oct.	Jan.-Feb.
	Bananas	Irrigated	July-Aug.	May-June
			Jan.-Feb.	Dec.-Jan.
	Coconut	Rainfed	Dec-Feb.	

Karaikal	Paddy	Kuruvai Samba Thaladi	May-June July-Sept. Oct.-Nov.	Sept.-Oct. Dec.-Jan. Feb.-March
	Pulses		Jan.-March	April-May
Mahe	Paddy	I Crop II Crop	April-May Aug.-Sept.	Sept.-Oct. Jan.-Feb.
	Coconut		June-Oct.	
Yanam	Paddy	Dalwa (Rainfed) Sarva (Irrigated)	Aug.-Sept. July-Aug.	Dec.-Jan. Dec.-Jan.
	Ragi	Irrigated	Sept.-Oct.	Dec.-Jan.
	Cholam	Rainfed	Sept.-Oct.	Dec.-Jan.
	Chilly	Rainfed	Sept.-Oct.	March-April
	Coriander	Rainfed	Sept.-Oct.	March-April
	Mustard	Rainfed	Sept.-Oct.	March-April
	Tobacco	Rainfed	Oct.-Nov.	Feb.-March

In Pondicherry region, the crops cultivated are cotton, ground-nut and cholam in dry lands. The major crop is paddy, followed by ground-nut (irrigated). In wet lands, a crop of paddy is followed by another crop of paddy and then again by another paddy or ragi or ground-nut where the soil is loamy. Paddy is followed by the cultivation of green manure in certain parts of this region. In Pondicherry region the raising of ragi along with irrigated ground-nuts is a common practice in all garden land areas.

The Territory, on account of its scattered set-up, consists of different types of soils ranging from light sandy to stiff clay and alluvium. The alluvial soil is very fertile and is well suited for paddy which explains the predominance of this crop in the Territory. But otherwise, the soil is said to be lacking in phosphoric acid. Another characteristic of the soils is that they are generally very thirsty.

Soils :

For purposes of survey and settlement, soils in the Territory are divided into five categories viz. (1) the alluvial and exceptional consisting of rich island soil as well as garden and other permanently improved soils of more than ordinary productiveness, (2) the *kalar* or black cotton soil, (3) the red ferruginous soil originating from sandstone, laterite, etc. (4) the calcareous soil originating from the underlying strata of chalk or lime, (5) the arenaceous soil consisting of more or less pure sand and lying as a rule on the sea coast. These five categories of soils are further divided into classes and sorts. The division into classes viz. clayey, loamy or sandy is made depending on the proportion of sand and clay in it. The division into sorts is based on the quantity of organic matter or the presence of other valuable or deleterious ingredients in it, such as salt, etc.

No systematic soil studies to establish the soil groups have so far been conducted in the Territory.³⁰ However, from the result of the analyses of the soil samples tested in the Soil Testing Laboratory in Pondicherry, some inferences were drawn on the general fertility status and soil condition of these soils. Soil fertility maps for Karuvadikkuppam and Tattanchavadi have been so far prepared.

Pondicherry region : The main soil types met with in Pondicherry region are red ferrallitic, black clayey and coastal alluvium. Further variations have also been recognised in these three main soil types. Thus, in the coastal alluvium, the saline tracts of the Marakkanam creek, the coastal sand dunes, both newer and older, have been distinguished. These are introduced differences on account of the textures such as sandy, loamy and clayey loam alluvium. Similarly in the black soils, two types are met with, namely, the marshy and the other with carbonate efflorescence.

Soil reaction in 75.7 per cent. of soils is neutral, 21 per cent. medium alkaline, 1.8 per cent. alkaline and 1.4 per cent. medium acidic.³¹ The soluble salt in 96.6 per cent. of the soils tested is in the harmless range. The soil texture varies from light to medium being 45 per cent. and 55 per cent. respectively. The nutrient index with respect to available nitrogen, phosphorus and potash is low.

Karaikal region : The region of Karaikal consists almost entirely of the coastal alluvium which can further be subdivided into sandy, sandy loam and clay loam. Soil reaction in 76.7 per cent. of the soils tested is neutral, 1.4 per cent. medium alkaline, 0.8 per cent. alkaline and 21.1 per cent. acidic.³² The soluble salts in 85.4 per cent. of the soils tested are in the harmless range. The soil texture varies from light, medium to heavy, being 20 per cent. 30 per cent. and 50 per cent. respectively. The nutrient index with respect to available nitrogen and phosphorus is low and medium in respect of potassium.

The coastal alluvium of Karaikal is suitable for the cultivation of paddy and pulses. The sandy loams and sandy belt are found suitable for the cultivation of cashew and casuarina.

Mahe region : Mahe region on the Malabar coast is covered by typical red laterite soil of Malabar. Places are not uncommon wherein sandy loam and clay loam soils are met with.

The soil reaction in 96 per cent. of the soil is neutral, 4 per cent. medium alkaline. Almost 95 per cent. of soils in the region are free from salinity hazards. The soluble salts in 93.0 per cent. of the soils tested are in the harmless range. The soil textures vary from light to medium, being 40 per cent. and 60 per cent. respectively. The nutrient index in respect of available nitrogen, potash and phosphorus is low, medium and low respectively.

The red laterite soil is covered by semi-dry crops like tapioca, etc. The sandy loam and clay loam soils are covered by paddy. Coconut and arecanut are the major crops grown in the region.

Yanam region : The soil met with in Yanam region is the alluvial type. The soil reaction in 43 per cent. of the soil is normal, 53 per cent. medium alkaline and 4 per cent. alkaline. The soluble salts in 91.0 per cent. of the soils tested are in the harmless range. The soil texture varies from medium to heavy being 61 per cent. and 39 per cent. respectively. Nutrient index in respect of available nitrogen and phosphorus is low and high in respect of potash.

The alluvial soil of Yanam is suitable for the cultivation of paddy, tobacco, chilly, coriander, fenugreek, etc.

Area under various crops :

The total area sown under all crops (food and non-food crops) is 50,617 hectares (1970-71). Food crops alone accounted for 82.9 per cent. whereas non-food crops covered 17.1 per cent. of the total cropped area. By 1975-76, the total area sown under all crops increased to 55,954 ha. Food crops alone accounted for 83.3 per cent. while non-food crops covered 16.7 per cent. of the total cropped area.

The following table shows the cropping pattern in this Territory in 1970-71 indicating the relative importance of the area under principal crops to total cropped area :

Food crops	Percentage of the area under the crop to the total cropped area		Non-food crops	Percentage of the area under the crop to the total cropped area	
	1970-71	1975-76		1970-71	1975-76
Paddy	60.3	58.0	Cotton	0.6	3.7
Ragi	3.6	5.0	Ground-nut	8.6	7.5
Cumbu	3.9	1.5	Gingelly	1.4	1.3
Other millets ..	0.6	0.6	Coconut	3.2	2.9
Pulses	6.7	10.6	Betel vines	0.1	3.2
Sugar-cane ..	3.1	3.0	Other non-food crops	3.2	1.2
Other food crops ..	4.7	4.6			
Total food crops ..	82.9	83.3	Total non-food crops	17.1	16.7

In 1961-62, 78 per cent. of the cropped area in the Territory was covered by food grains, paddy alone accounting for 65 per cent. During 1970-71 the percentage of area under food crops to the total cropped area was the highest in Karaikal region being 93.1 per cent. By 1975-76 it increased to 98 per cent. In Pondicherry region 78.4 per cent. of the total cropped area was accounted for by food crops. By 1975-76, the percentage of area under food crops increased to 85.4 per cent. As much as 72 per cent. of the cropped area was under paddy. A number of other important cash crops such as sugar-cane, coconut, ground-nut and cotton are also being grown here. In Mahe the cropping pattern is highly biased in favour of non-food crops which account for 64.1 per cent. of the gross area sown during 1970-71. By 1975-76 it increased to 72 per cent. Per capita productivity in this region is higher because of the prevalence of cash crops. In Yanam the area under food crops represents 72 per cent. of the gross area sown. The cropping pattern is thus 'heavily biased in favour of food crops.'



1. Details of area in hectares under cereals in each region of the Territory during 1975-76.*

Region	Paddy I crop	Paddy II crop	Paddy III crop	Total	Cholam	Cumbu	Ragi	Varagu	Other millets	Total cereals
Pondicherry	3,010	11,290	3,050	17,350	250	850	3,025	105	20	21,600
Karaikal	3,750	10,850	50	14,650	—	—	—	—	—	14,650
Mahe	40	40	—	80	—	—	—	—	—	80
Yanam	460	—	—	460	—	—	—	—	—	460
	7,260	22,180	3,100	32,540	250	850	3,025	105	20	36,790

2. Details of area under pulses in each region during 1975-76.

Region	Redgram	Blackgram	Greengram	Horsegram	Other pulses	Total pulses
Pondicherry	—	462	220	35	120	837
Karaikal	—	3,170	1,910	—	10	5,090
Mahe	—	—	—	—	—	—
Yanam	25	15	20	—	—	60
	25	3,647	2,150	35	130	5,987

* Statements 1 to 7 furnished by the Directorate of Agriculture.

3. Details of area in hectares under vegetables in each region during 1975-76.

Region	Tapioca	Onion	Sweet potatoes	Other vegetables	Total vegetables
Pondicherry	660	10	295	325	1290
Karaikal	15	—	5	85	105
Mahe	25	—	—	—	25
Yanam	—	10	—	10	20
Territory	700	20	300	420	1440

4. Details of area in hectares under fruits in each region during 1975-76.

Region	Bananas	Citrus	Mangoes	Guava	Grapes	Others	Total fresh fruits	Cashew nuts	Total fruits (Fresh & Dry)
Pondicherry	130	—	250	20	—	—	400	305	705
Karaikal	20	—	50	—	—	—	70	5	75
Mahe	10	—	10	—	—	—	20	—	20
Yanam	—	—	—	—	—	—	—	15	15
Territory	160	—	310	20	—	—	490	325	815

5. Details of area in hectares under spices and condiments during 1975-76.

Region	Betelnut	Chillies	Coriander	Pepper	Tamarind	Total condiments and spices	Total food crops
Pondicherry	70	5	—	60	135	24,567
Karaikal	15	—	—	20	35	19,955
Mahe	—	—	15	—	85	210
Yanam	40	45	—	—	85	640
Territory	125	50	15	80	340	45,372

6. Details of area under oil-seeds during 1975-76.

Region	Ground-nut	Coconut	Sesamum	Other oil-seeds	Total oil-seeds
Pondicherry	740	750	10	5,450
Karaikal	240	25	—	440
Mahe	550	—	—	550
Yanam	120	5	—	250
Territory	1,650	780	10	6,690

7. Details of miscellaneous crops during 1975-76.

Region	Cotton	Sugar-cane	Betel vine
Pondicherry	2,120	1,707	65
Karaikal	—	—	—
Mahe	—	—	—
Yanam	—	—	—
Territory	2,120	1,707	65

Crops grown in the Territory :***Pondicherry region:***

Paddy : Paddy is the principal crop grown here. It is cultivated during three seasons known as *kuruvai* (over a limited area), *samba* and *navarai*. The transplantation method is mostly followed for paddy cultivation. The per hectare yield in Pondicherry was estimated to be slightly lower than that in the adjoining areas of Tamil Nadu.³³

(i) *Kuruvai* : Only short duration crops are grown during *kuruvai* season otherwise called *sornavari* in Pondicherry region. The varieties cultivated are I.R-20, and CO-29. Vaigai, Kaveri, Kanchi, Rathna, CO-33 (Karuna), Kannagi, Triveni, ADT-31 and Amaravathi are the improved varieties recently introduced. Nurseries are raised sometime during the first week of June and the harvest is completed by September.

(ii) *Samba* : Long duration varieties such as CO-25, DCP-1, medium duration varieties like IR-8, IR-20, Ponni, Jaya, etc. are cultivated during the *samba* season. Bhavani, Bhagavathi and Culture 13943 are the new introductions in this region. CO-25, Ponni, IR-20 are high-yielding strains for this season. Nurseries are raised from August onwards and harvest completed during February-March.

(iii) *Navarai* : Otherwise called 'summer paddy', it is cultivated with the help of irrigation by pump sets. Short and medium duration paddy varieties like IR-8, IR-20, Bhavani, Rathna, Kaveri, Kanchi, CO-29, Vaigai are generally grown. Vaigai, IR-8, Jaya, IR-20 CO-29, ADT-31 are the high-yielding strains cultivated during this season. This crop will be sown during February-March and the harvest will be over by June-July.

Cumbu/Bajra : Cumbu is normally cultivated under irrigated condition. In some parts, however, it is cultivated as rainfed crop. Being of short duration type, this crop has become popular in this region. This crop is raised generally in dry lands as a kharif crop during the south-west monsoon season. Generally it comes up well in any type of soil. Until very recently a local variety of cumbu known as Nattu Cumbu alone was grown. With the introduction of the High-Yielding Variety Programme, farmers are taking to high-yielding strains such as HB-1 Cumbu, HB-3, HB-4, NHB-4, NHB-5 and PHB-10 with advantage.

The area under this crop has also shown a steady increase under the impact of the Multi-cropping Programme. The ryots until recently used to broadcast the seeds. With the popularisation of the package of practices under the High-Yielding Variety Programme, farmers are increasingly adopting the transplantation method after raising nurseries with hybrid seeds supplied.

Ragi : Ragi which comes up well in any type of soil is mainly cultivated in summer under irrigated condition. In some parts, however, it is grown as a rainfed crop. Generally, nurseries are prepared in dry conditions, and the seedlings are then transplanted to the main field. Cultivation of the crop is confined chiefly to Pondicherry region and the crop is sown mostly in dry lands irrigated by tube-wells and wells. It ranks third among the principal crops cultivated in the region. This is one of the crops giving good revenue to the ryots with comparatively less care and irrigation. The local strains are Perum Ragi, PLR-1 and Arupatham Kodai. The last one is a short duration variety. There is now a trend to replace the above varieties by the new ragi varieties, namely CO-7 and Sarada which give more yield compared to others, besides being short duration varieties. Ragi is one of the crops covered by the Multi-crop Programme and the Intensive Agricultural Area Programme. This has been found adaptable as a mixed crop and is grown with ground-nut. After maturity of the crop and before harvest, ground-nut seeds are dibbled or green manure seeds are broadcast amidst the standing crops so that when the ragi crops reach the harvesting stage, the intercrop is full grown, thereby saving time and cost of preparatory cultivation. Ragi is sought after by the poorer sections of the people in this region.

Jowar : This crop comes up well in wide soil conditions such as sandy types. Until very recently this was popular as a rainfed crop in some parts of the region. With the introduction of the High-Yielding Varieties Programme, the ryots are using hybrid varieties, such as CSH-1, under irrigated condition, and are following the transplantation method of cultivation. CSH-5 is the newly introduced variety for cultivation which is gradually replacing the other CSH varieties. The local people are not themselves habitual consumers of this crop. Added to this, there is no steady market for this grain. As such, the cultivators are not assured of any steady return from its cultivation.

Maize : Newly introduced in the region, the crop has become popular because it is a short duration and high-yielding crop. It does not, however, enjoy a steady market. Being of short stature, the plants stand up to the rigours of cyclone or heavy rain.

Millets : The area under other millets such as *thinai*, *varagu* and *samai* is very small. These millets are cultivated in dry lands during the kharif season mostly as dry crop.

Pulses : Blackgram and greengram are the main pulse crops being grown in rice fallows during summer in Pondicherry region. It is popular in Bahur and its surroundings. The local variety being grown is known as *kuthu ulundu*. The local variety is now replaced by ADT and CO high-yielding varieties of blackgram and greengram. The short duration varieties, T 9 Black gram and Bisaki moong (Anjugam) gram are also now being introduced in the pulse growing area. These two varieties are gaining popularity among the farmers. Redgram is also being grown in Madagadippattu area only to a small extent, mostly as a mixed crop.

Fruit cultivation : The important fruits grown in this region are mango, guava and cashew. The area under fruit crops has been showing an increase from year to year. Fruit trees generally are grown on lands which are mostly uneven and where other crops cannot be grown. Vegetable seeds as well as fruit plants produced in the Madagadippattu Orchard-cum-Nursery are made available to the ryots. The common banana varieties grown in this region are—*poovan*, *monthan*, *pachainadan*, *Rasthali*, *robusta* and dwarf *cavendesh* varieties of banana were newly introduced in the region. These varieties are not only quick bearing but also give good yield. As bananas do not enjoy a steady market, farmers show some reluctance to bring larger area under these varieties. Banana is grown in Ariyankuppam, Tirubhuvanai and Tiruvandarkovil. Cashew is mainly grown in Kalapet. Mango is grown in Kalapet, Pillaichavadi and Edaiyarpalaiyam.

Vegetables : The main vegetable-growing seasons in this region are *aadi pattam* (August—September) and *thai-pattam* (January—February). Vegetables are grown in the rice fallows also. They are grown as an intercrop in groves as well. The main types grown are brinjal, bendai, pumpkin, tomato, different types of gourds, chillies and greens. Unlike in other places, the ryots in this region grow vegetables in large areas for commercial purpose.

The main vegetable growing areas are Thengathittu, Nonanguppam, Purnankuppam, Edaiyarpalaiyam, etc. In Thengathittu, brinjal and onion are mainly grown. In other areas, tomato, brinjal, bendai and greens are mainly grown.

Tapioca (Maravalli) : According to an estimate prepared in 1957, about 1,656 tons of tapioca were annually produced in Pondicherry region alone. A good portion of it was used for human consumption while the rest was bought by sago manufacturers of Salem. It was then estimated that production can be increased to 7,000 tons by bringing more land under tapioca cultivation in and around Pondicherry. In poor light soils as well as in soils where moisture retentive capacity is too low, tapioca crop is taken up. In times of scarcity of food grains, tapioca is used as the staple diet of the people.

Tapioca is now mainly grown in Villiyanur, Mannadipattu and Nettiappakkam Communes although formerly it used to be grown in Ariyankuppam and Bahur Communes. Being the most important tuber crop grown in the region, a programme was launched in 1974-75 to increase the area under the crop. By 1976, in all 700 ha. were brought under this crop. The estimated production was 14,000 tonnes. The M. 4 and H. 165 are the newly introduced high-yielding varieties.

Sweet potato (Sarkaraivalli) : This is another tuber crop grown in garden lands. The ridge and furrow method is generally followed for its cultivation. This crop is cultivated in about 300 ha. New varieties are being introduced.

Condiments and spices : This crop is taken up in garden lands of this region. Nurseries are raised first in dry condition and the seedlings are transplanted to the main field. Application of chemical fertilisers and plant protection measures are increasingly adopted by the ryots to increase the yield of this crop. Production is too low even to meet the Territory's own requirements.

Oil-seeds : Ground-nut is the major oil-seed grown in this region. Owing to its profitability, ryots show special interest in the cultivation of this crop. Ground-nut is sown as irrigated crop during January—March, and as dry crop during July—August and harvested in November—December. This crop is taken up under dry as well as irrigated condition in this region.

Dry ground-nut crop : About 663 hectares are under rainfed ground-nut crop. Rainfed cultivation of ground-nut is carried on only in parts of Ozhukarai and Villiyanur Communes where the lands are slightly elevated and devoid of irrigation facilities. Ground-nut seeds are sown behind country plough in the plough furrows in the month of July or August when the showers of south-west monsoon are received. The soil gets moist enough for sowing. For

further moisture required for its vegetative phase, this crop depends on rains only. The success or failure of the crop depends on the vagaries of the monsoon. But this fear was dispelled by conducting manurial demonstrations on dry ground-nut. The ryots showed some reluctance to apply chemical fertilisers to dry ground-nut. Recently the foliar application of urea on dry ground-nut was also demonstrated. Cultivators are slowly growing fertiliser conscious. In some areas, ragi or cumbu or pulses are grown as mixed crop alongwith rainfed ground-nut crop. TMV-2, TMV-7 and TMV-9 among the bunch varieties and TMV-3 among the spreading varieties are the popularly cultivated varieties in this region in both dry and irrigated conditions.

A much more extensive area in Nettappakkam, Mannadipattu and Bahur is under irrigated ground-nut crop. Being grown in controlled conditions with the adoption of improved package of practices, irrigated ground-nut is looked upon as a paying proposition among the growers of this region. Wherever water is available after the *samba* harvest, ground-nut is usually sown. After one or two shallow ploughings, the field will be laid out into beds with irrigation channels. After soaking the field, seeds are dibbled with the help of hand hoes. In some places spreading varieties of ground-nut are sown amidst the standing crops of ragi a little before harvest. When the vegetative growth takes place, an intercultivation is given to arrest weed growth and to aerate the soil. This facilitates proper root development. The crop is watered as and when necessary i.e. just to provide a wetting without allowing water to stagnate in the field. At the flowering stage, the soil around the plants is raked by hand hoes and collected around the plants to facilitate normal peg formation. Generally dusting and spraying of pesticides are being carried out upto the flowering stage. The crop is harvested when the vegetative part turns yellowish and the inner surface of the shell turns blackish. Harvest is carried out by uprooting the plants.

Coconut : It is one of the major oil-seed crops in this region. An area of 1,650 hectares is under coconut groves producing about 16.7 million nuts per year. New plantings are carried out in the month of June. In big field-bunds coconut is grown as border crop. Along road sides planting is taken up by the Municipalities. In 1956 it was estimated that 96,00,000 coconut husks, out of which 675 tons of fibre can be produced, were available annually in the region. A good portion of this was exported outside this settlement and the rest consumed locally. The barks are retted in the backwater area

near Sanyasikuppam Manaveli. About 4/5 of the total quantity of fibre (675 tons) produced in the area was exported to centres like Vellore, Katpadi, Ulundurpettai and Cuddalore.³⁴

There are private coconut nurseries which supply coconut seedlings to the growers. Such seedlings do not have the desired quality. A Coconut Nursery is attached to the State Seed Farm, Madagadippattu, where seed nuts of mother palms with established pedigree records in the southern districts of Tamil Nadu are sown and the seedlings thus raised are distributed to ryots at cost price. In some parts of this region, crops such as tapioca, vegetables, ground-nut, etc. are raised in-between the rows of coconut trees. Fruit plants of short stature are also cultivated in-between the rows of coconut trees. Application of fertilisers is carried out in *topes* where there is adequate water supply. Interculture is carried out once a year by manual labour or ploughing. In certain villages, cotton waste as well as farm waste are applied and ploughed with a view to giving good aeration in the soil layers and improving the structure and moisture retentive capacity of the soil.

Being a wet area, tapping of toddy is extensively followed which considerably affects the yield of coconuts. A good portion of the coconuts are used for domestic consumption with the result that very little is left for oil extraction. The available coconut fibre leaves enough scope for industrial utilisation. The other secondary products such as shells and leaves are also utilised.

Sesamum : This crop is cultivated in 750 hectares in this region. Popular both as a dry and an irrigated crop, the irrigated crop is generally taken in summer. It is grown as a mixed crop along with pulses, ground-nut, dry cotton, etc. Harvesting is done by uprooting the plants. The plants are then dried up in the sun and beaten by sticks for separating the grains.

Green manure : In Pondicherry, growing of green manure crop before raising *samba* crop is commonly practised. Daincha is the common green manure crop being grown in this area. Government also encourages farmers in growing green manure crops.

Sugar-cane : Sugar-cane is an important commercial crop of this Union Territory. It is grown in Pondicherry region where alone facilities exist for crushing the canes. Prior to the establishment of the Sugar Mill in Pondicherry, the area under

this crop was very small. Whatever was grown here was sent to the sugar factory at Nellikkuppam.³⁵ Assured market facilities and attractive prices together with the availability of technical know-how from the Departmental side have all encouraged its cultivation in the region. In 1956-57, production of sugar-cane was estimated at 3,256 tons. The area under sugar-cane during 1956-57 was 73.2 hectares. This crop is grown in almost all communes of this region.

It is generally cultivated in rotation with paddy in wet lands. After the harvest of paddy crop, the land is ploughed deep by tractor or other ploughs. After giving the required number of ploughings to obtain a good tilth, trenches are formed together with irrigation channels. For covering larger areas, the ryots utilise ridge ploughs drawn by tractor. After forming ridges and furrows, they are mended with spades through manual labour. Since the soil type in this region is different from other parts, the method of planting is also different. Two budded or three budded sugar-cane setts are first sown in the furrows and the setts are covered with soil of 2.5 cm. to 5.0 cm. depth and watered. Irrigation is stepped up when all the setts sprout. Then onwards, irrigation is given at an interval of six to ten days depending upon the nature of soil, taking care that there is no stagnation of water in the fields. Harvesting is done after 10 to 12 months when the cane is required for milling purpose or after six to eight months when the cane is meant for seed setts. Generally seed setts are raised in separate nurseries or the top shoots of well grown canes are sometimes utilised. Seed canes fetch more price than mill canes. During the 1973-74 season, roughly 2,00,000 tonnes of cane were produced. A major portion of this was used by the sugar mill at Ariyur. The ordinary varieties are being replaced by improved varieties such as CO-658, CO-740, CO-853 and CO-6304. Among these, CO-658 was found better suited to this region and liked by the ryots. However, it has been losing ground in view of its susceptibility to red-rot disease.

Cotton : This is the main fibre crop cultivated in this region. The area under cotton is 283 hectares. This crop is taken up during summer under irrigated condition. Summer Cambodia cotton is grown in garden lands during the *masi-pattam* (February-March) season. This was introduced in Pondicherry by the French, and then spread to other parts of India as well. The ryots follow the ridge and furrow method of planting and the seeds are dibbled. Although Pondicherry is an important textile centre, the internal production of this fibre is inadequate to meet the local requirements. Moreover, lands

suitable for cotton growing is also not available. The main cotton growing areas in Pondicherry are Nettappakkam, Mannadipattu and Bahur. Nowadays M.C.U. 4, M.C.U. 5, P.R.S. 72 and Varalakshmi are mainly grown in this region. P.R.S. 72 is being cultivated in rice fallows in Bahur area.

Flowers : The main flower growing areas in Pondicherry are Mangalam, Thengathittu and some isolated pockets of the coastal areas and Sedarappattu. Jasmine, rose, crosandra, marigold, chrysanthemum are the flowers mainly grown. The farmers are finding it profitable.

Betel vine : It is grown in parts of Villiyanur and Ozhukarai Communes and enjoys a steady market.

Karaikal region :

The pattern of cropping, the economic standard and the agricultural pattern followed in this region are very similar to those of Thanjavur District. The cultivation seasons as well as irrigational conditions depend mainly on the release of water from the Mettur Dam. Generally water is available from June to January-February. As sources of irrigation dry up during summer, ryots are able to raise only two crops during the year. Growing a single crop of paddy is also not uncommon in this region. Hence the sinking of bore-wells and deep bore-wells in the region was encouraged. The partial success achieved in this endeavour has encouraged the ryots to take to a short duration crop during the summer season. The underground water tables met with at various places were mostly found to be saltish and unfit for irrigation purposes. In the areas adjoining Mayuram and Kumbakonam Taluks, water struck in the bore-wells was found suitable.

Apart from vegetables and fruits some varieties of pulses and spices, condiments and oil-seeds are cultivated in the region, although in terms of area covered by these crops, they are very insignificant.

Paddy : The paddy growing seasons are popularly known as *kuruvai*, *samba* and *thaladi*. With the onset of south-west monsoon and the release of water from the Mettur Dam, the *kuruvai* nurseries are prepared under wet condition. The general local varieties raised are ADT-3 and ADT-2, although ryots are

increasingly taking to high-yielding short duration strains such as Karuna, Kannagi, Triveni, ADT-31 and Amaravathi. Not much of fertilisers are applied to the *kuruvai* lands, as green manure extensively raised in the fields during summer are available for *kuruvai* planting. The crop comes to harvest by September—October.

Long and medium duration varieties are cultivated during the *samba* season. The main varieties grown are ADT-8, ADT-1, CO-25 and local strains such as Kunanga samba. High-yielding strains like Jaya and IR-8, IR-20, Ponni are slowly replacing those now in vogue. *Samba* lands are mostly single cropped as they lie starved of water during the months preceding the *samba* season so as to raise a *kuruvai* crop. Moreover, the *thaladi* season overlaps the *samba* season. After the *samba* harvest, pulses are sown in the rice fallows utilising the available moisture.

In the lands where *kuruvai* is cultivated, after the harvest of the *kuruvai* crop, long duration varieties such as CO-25, and medium duration varieties like IR-20 and Ponni are planted as second crop during the *thaladi* season. The nurseries for this crop are raised about a month before the harvest of *kuruvai* crop. The *thaladi* crop comes to harvest by February.

The *ottadai* crop is raised by mixing two varieties of different durations i.e. one of short duration and the other of long duration. The nursery is raised sometime in the month of June. The seedlings comprising both the varieties are then transplanted in the field. The short duration variety comes to harvest first, and this crop along with the foliage of the long duration variety is cut. After harvest, the stubbles of the long duration variety sprout and the earheads come to maturity by February. This system is followed only in low lying areas subject to water stagnation during October—November, as it is not possible to carry out preparatory cultivation for the second crop. One great advantage of this system is that the cost of labour and preparatory cultivation is only minimal.

Pulses : Pulses like greengram, blackgram, etc. are grown in rice fallows during summer. The ryots take to their cultivation with a view to putting to some use the land during summer. These crops also help to supplement their income from land. The succulent parts of pulses plants, left after the extraction of

grains, are utilised as green manure. Now the high-yielding varieties like ADT-1, CO-1, T-9 blackgram and ADT-1, CO-1, Anjugam-greengram have replaced the traditional varieties.

Vegetables : Such vegetables as brinjal, tomato, bendai, gourds and greens are cultivated more in garden lands and scatteringly in kitchen gardens and school compounds. Vegetable cultivation is not so popular in this region as in Pondicherry.

Coconut : This is the most popular oil-seed crop of this region. The ryots resort to intercultivation operations following the onset of the south-west monsoon.

Ground-nut : To a certain extent cultivation of ground-nut as rainfed crop in the months of November--December has been resumed recently. Local varieties and High-Yielding varieties like Pol-1, TMV-2, TMV-7 and TMV-9 are the main varieties of this region

Sunflower : Although the cultivation of sunflower was taken up by the ryots, it has been found unsuitable for cultivation in the Territory.

Mahe region:

The main crops cultivated here are coconut, paddy, banana, arecanut, pepper and mango.

Paddy : Paddy is cultivated only in a few patches in the region. The number of crops raised are three, two of which are of short duration and one of long duration.

The short duration crop known as *Viruppu* lasts from April--May to August--September. Sowing is done in dry nurseries either by broadcasting or by dibbling the seeds behind the plough or after digging with *manvetties*. The local varieties are known as *thonnooran*, *anakkodan*, *vadakkan*, *keeripala*, *parambukottan*. The improved varieties introduced earlier were PTB-5, PTB-8, PTB-9, PTB-28, PTB-32, IR-8 and MTM-3.

The second crop season which is called *chitteni* lasts from September—October to December—January. This is a transplanted crop for which nurseries in wet condition are raised. While *chitteni* is a popular local variety, the improved varieties are PTB-4, PTB-20 and PTB-21. Now IR-8, Jaya, Masuri and IR-20 are the popular varieties.

The long duration crop is known as *mundan* and the season lasts from May to December—January. The crop is either broadcast or transplanted.

Tapioca : Planting is done throughout the year and the crop comes to harvest in about ten months. The yielding potential of local variety is from two to three kg. of tubers per plant while that of improved variety is about 5 kg. tubers per plant. The M. 4 and H-165 are the improved varieties increasingly sought after by farmers.

Banana : There is no well defined season for this crop and as such it is raised throughout the year. The *poovan*, *mannan*, *chenkathali*, *kunnam*, *nendram*, *thekkan* or *udukkan*, *kathali*, *adakkapoovan*, *mysore*, *thezhuthani* and *thiruvoden* are the most commonly cultivated varieties. The Mauritius, Grosmischel, Peddapatcha are the varieties recommended to the planters in the region in view of the high incidence of bunchy top disease in other varieties.

Arecanut : Seedlings are generally planted in June—July. The peak harvesting season lasts from November to February. On an average about 400 nuts are obtained from a tree in a year. 'Kasargode' is the most popular variety of arecanut grown here.

Pepper : Cuttings are planted in June-July. Rooted cuttings are planted upto August-September. Annual tying of vines to standards and logging of standards is a common practice. The *kalluvalli*, *uthramcotta* and *balancotta* are the most popular local varieties. *Karimunda* is an improved variety. *Panniyur-1* is the improved variety recommended.

Coconut : Seedlings are planted mostly in June—September. The peak harvesting season lasts from January to May. The average number of harvests per year is eight. The average yield per tree per annum is about 50 nuts. *Kuttiadi* variety of coconut is the most sought for variety by the cultivators among the west coast tall varieties. The hybrid 'T & D' variety is now being popularised in the region.

Yanam region .

Paddy : This is a long duration crop (*sarva*). Nurseries are raised generally during June—July. It is also a practice in this region to raise nurseries in dry condition. The crop comes to harvest in December. The main varieties are SLO-13, MUT-3 and GEB-24. High-yielding varieties grown are Mashuri (Ponni), Jagannath, IET 1991 and RP 193-1.

A *dalwa* crop is raised as a second crop when water is available in sufficient quantity. This is a short duration crop. The main varieties grown during this season are CO-29, CH-45, SLO-19, etc. High-yielding varieties like Padma, Jaya, IR-8 and Ratna are also grown.

Mixed cropping : This is a peculiar system followed only in this region of the Territory. Hence, one of the varieties of paddy viz. Bala, MTU-17 or MTU-18 is sown in dry condition in-between the lines of redgram crop. The paddy crop is harvested before the redgram crop comes to harvest.

Jowar and Cumbu : With the onset of summer showers in May, jowar and cumbu are taken as rainfed crops in some parts of the region.

Ragi : This crop is sown in November under rainfed condition. The main variety being cultivated is AKP. I.

Pulses : About the time of *sarva* harvest, sprouted seeds of blackgram, greengram, pillipesera, etc. are sown. Its cultivation is resorted to as a source of subsidiary income by the farmers in the region.

Coconut : Coconut is grown mostly in upland areas of Mettakurru and Adivipolam under rainfed condition.

Ground-nut : Ground-nut is the most popular oil-seed crop grown in the region. It is raised mostly during July—August in upland areas under rainfed condition. Generally bunch varieties are sown. During the months of December and January, ground-nut is cultivated as rainfed crop.

Progress of scientific agriculture:

The use of modern labour saving devices and implements, the adoption of efficient plant protection measures, the use of improved seeds and the application of scientific manures will alone testify to the progress of scientific

agriculture which can be measured in terms of increased production. Viewed as such, the Territory has no doubt witnessed dramatic changes in the sphere of agricultural practices in the course of the last two decades. But an inquisitive visitor to the interior of the Territory will find age old practices still being followed alongside the most modern methods, indicative of a period of transition.

Analysing the situation in 1965, the National Council for Applied Economic Research pointed out that improved methods are adopted only in bits and a scientific method of cultivation cannot be said to have been adopted, as cultivators were not familiar with the various types of fertilisers and the suitability of each fertiliser for the crops. Lands were seldom prepared before the sowing of crops.³⁶ Though the entire Territory was fully covered by the extension service, its impact on the peasants was rather limited. For example, in 1965 the average yield of paddy per ha. was only 1,800 kg. About the same time, the farm of Sri Aurobindo Ashram showed a yield of 3,500 kg./4,500 kg. per ha. It was, therefore, pointed out that it should be possible to raise the average yield of paddy to 3,000–4,000 kg. per ha. by 1975. Similarly, it was felt that sugar-cane yield could be increased to 1,00,000 kg. per ha. by 1975 mainly by applying more fertilisers and by using improved strains.

In time, the Directorate of Agriculture also came forward to implement several measures to encourage the adoption of scientific methods of cultivation in the Territory. The most important was the introduction of new high-yielding varieties. Provision of all inputs like credit facilities through several agencies, supply of chemical fertilisers, improved seeds, intensification of pest control measures, popularisation of improved techniques through farmers' training and demonstrations were some of the important measures through which increased production was sought to be achieved in the Territory. These efforts evoked encouraging response with the result the area under improved methods of cultivation showed a perceptible increase during the next few years.

Agricultural implements:

The use of traditional implements like wooden ploughs is still continued in spite of the fast developing tendency towards mechanisation. The implements available with the farmers are mostly of the older types like *manvetti*, *kalakattu*, *aruvalu*, *erukalape*, *parambu* and *palakai alavangu*.³⁷ A good number of the ryots still use the traditional type of agricultural implements like wooden ploughs with simple plough shares, spades,

crow-bars, carts, cart axles and cart wheel tyres. Left with limited resources and very small holdings, most of the ryots were not enthusiastic about improved implements. With a view to overcoming these hurdles, arrangements were made for the subsidised distribution of improved implements. The Small Industries Service Institute confirmed in 1959 that ryots in the Territory were increasingly adopting improved implements.³⁸ With the popularisation of the Japanese method of cultivation, the demand for improved agricultural implements like paddy weeders and mulching machines showed steady increase.

The labour saving devices adopted in this Union territory are given below :

1. Bose ploughs.
2. Iron ploughs.
3. Intercultivators.
4. Burmese setturns and trammers.
5. Ridge ploughs.
6. Ground-nut decorticators

Bose ploughs have become the fashion as the result of intensive efforts made in the fifties. This plough is not only cheap, but also found suitable for the varied texture of the soil and has thus gained much popularity. Such implements as green manure trampler, wet land puddler, etc., were some of the other modern implements which caught the imagination of our agriculturists. The Directorate through the agricultural extension workers tried to popularise the *P.S.G. 16c.*, *P.S.G. 10*, *Cooper-11* and *Cooper-25* among cultivators as they were found suitable for the type of soils met with in the region.

Cattle served as the chief motive force for ploughing. Many well-to-do ryots have come to possess farm machinery like tractors and power tillers. Creditworthy cultivators were facilitated to purchase them under hire-purchase arrangements. The total number of ploughs as revealed by the 1961 census was 19,581 of which 14,206 were wooden ploughs and 5,375 iron ploughs. There were as many as 3,606 carts mainly used for agricultural purposes in the Territory.³⁹

At the end of the Third Five Year Plan (1966) there were 17,119 ploughs in the Territory, of which 12,545 were wooden ploughs and 4,574 iron ploughs. There were only 2,758 carts in the Territory used mainly for agricultural purposes.⁴⁰ By 1972, the total number of ploughs in the Territory is reported to have increased to 24,671 of which 15,801 were wooden ploughs and 8,870 iron ploughs. There were in all 3,745 carts.

Since 1969, the scheme for the subsidised distribution of improved implements is being implemented under the Community Development Programme. The departmental tractors were made available to the ryots to encourage the adoption of mechanised cultivation. Further, long term loans were also advanced to the ryots for the purchase of tractors. As many as 75 tractors were distributed through the Directorate of Agriculture as well as through dealers upto 1971-72. Between 1958-59 and 1971-72 the Directorate provided loans for the purchase of 116 tractors and three power tillers. The programme of granting loans to cultivators for the purchase of tractors and tillers was, however, discontinued from March 1972. Mechanisation has made its impact on agriculture to the level of tractor ploughing, hauling and other tillage operations especially in respect of cash crops like sugar-cane. The use of *kavalai* and *picotah* was popular in irrigation. They have almost entirely been replaced by pump sets. The pump sets were mostly operated on oil. However, with the progress of electrification, the oil pump sets have been replaced by electrically operated ones. The progress registered in this direction should be evident from the fact that power connections for agricultural purposes had increased from 267 in 1955 to 6,081 in 1974.⁴¹

Chemical fertilisers are supplied to the ryots through the Marketing Society, Village Co-operative Societies and private dealers. The per hectare consumption of fertilisers in Pondicherry vis-à-vis the all-India average during 1972-73 is furnished below :

			N	P	K
Pondicherry	..	..	68.40	39.60	22.90
All-India	..	..	10.90	3.60	2.00

The per hectare consumption of fertilisers during 1973-74 was also the highest in the whole of India.

Seeds and seed farms: The use of improved seeds of paddy, millets, oil-seeds and cotton was almost a new thing for farmers in the Territory at the time of merger. They started paying attention to the quality and purity of seeds only after these ideas came to be propagated among them. By 1959, it was estimated that nearly 10 per cent. of the area in Karaikal and 50 per cent. of the area in Pondicherry were under improved seeds of all crops. The cultivators themselves were persuaded to raise paddy nurseries in 'cent plots' to meet their own requirements of seedlings. Nucleus seeds of improved varieties of ground-nut were multiplied on ryots' holdings for further distribution. Seeds of promising varieties of vegetables were purchased and distributed to the ryots. A greater awareness is evident nowadays in the selection of seeds and preparation of seed beds. The use of improved seeds is seen as one of the important means to increase agricultural output in the Territory.

In an attempt to produce quality seeds within the Territory, two State Seed Farms were set up, one at Madagadippattu (10 ha.) in Pondicherry region and another at Mathur (14 ha.) in Karaikal region. The improved seeds are multiplied in these farms for further distribution to the ryots. The State Seed Farm at Mathur specialises in the production of quality paddy seeds, whereas the State Seed Farm at Madagadippattu is engaged in the multiplication of seeds of paddy, pulses, millets, vegetables, etc. The production of improved seeds is supervised by the respective Farm Managers. The nucleus seeds purchased from the neighbouring state of Tamil Nadu are multiplied in the two State Seed Farms and then distributed to the ryots for further multiplication and distribution. Only good quality seeds from the Seed Farms are supplied to the farmers and the remaining seeds are disposed off as non-seeds. The State Seed Farms also serve as demonstration farms.

Coconut seedlings are raised in Pondicherry, Mahe and Yanam. Major portion of the requirements of this Union Territory is raised in Pondicherry region. There is a Coconut Nursery attached to the State Seed Farm, Madagadippattu, and seed coconuts procured from Chencotta area of Tirunelveli District and some nuts from Mahe region are sown in the nurseries. The seedlings obtained from this nursery are distributed to the ryots on a no-loss-no-profit basis. An area measuring 3.2 ha. adjoining the Madagadippattu Seed Farm was purchased for setting up an orchard-cum-nursery.

Manuring : The main crop of paddy was grown on the same land year after year. Sometimes even three crops were raised within the same year. This process exhausted the soil of its nutrients and called for replenishment by an adequate use of fertilisers. It was also seen that nitrogen content of the soil

was low. It also lacked phosphoric acid. This combined deficiency could be removed only by the use of organic manures, specially green manures, with an added dose of superphosphates. Traditionally, however, the ryots used to apply only farm-yard manure in the lands. Green manuring became quite common in the Territory after merger and the area under green manuring is said to have registered some increase. Green manure crops such as kolinji, pillipesara, daincha, sunhemp, etc. are popular.

With increased irrigation facilities, however, relatively less land would be available for growing green manures. The National Council for Applied Economic Research, therefore, suggested that the emphasis should be on the intensive usage of chemical fertilisers, viz. urea, calcium, ammonium nitrate, ammonium phosphate and superphosphates. Ryots in the Territory are increasingly taking to chemical fertilisers like urea and superphosphate, muriate of potash besides complex and mixed fertilisers.

Agriculturists have come to accept rotation cropping as another means of preserving the fertility of the soil. In Pondicherry, the rotation of crops followed in dry lands are cotton, ground-nut and cholam. In wet lands, paddy is followed by paddy, ragi, ground-nut or paddy in areas where the soil is loamy. Paddy followed by green manure is also in vogue in certain parts of this region. In Karaikal, paddy crops are usually followed either by green manures or pulses. In 1959 the area under paddy rotated with either green manure or pulses came to about 3,600 ha. in Karaikal alone. The rest of the area was left fallow after paddy. Raising of ragi along with irrigated ground-nut is a common practice in all garden lands.

The preparation of compost is being popularised in the Territory through propaganda and demonstrations with a view to making better use of farm wastes. There is a definite trend towards increased use of compost and synthetic manure in the Territory. Use of compost, municipal rubbish, town waste, waste cotton from the mills, etc. is very common. Cattle and sheep penning is also observed in certain parts. The municipalities are also assisted in preparing compost out of night soil. The V Plan fixed the target of rural compost at 1,32,000 tonnes, urban compost at 25,000 tonnes and the area of green manuring at about 48,800 ha. Although the performance till 1965 particularly in the case of urban compost was very slow, it was suggested that the compost manure was a very good source of nitrogen and its application must be increased as much as possible.⁴² The V Plan had fixed the target of rural compost at 1,20,000 tonnes, urban compost at 40,000 and the area under green manuring at about 10,000 ha. at the end of the V Plan.

Diseases and pests : Some of the common diseases and pests affecting some of the important crops in the Territory are recounted here. Stem borer, green jassids, white jassids, leaf-roller, and ear head bugs are the important pests which cause much havoc. Among these, stem borer seems to be the major pest attacking crops on all seasons, namely, *kuruvai*, *samba* and *navarai*. The major pest which attacks paddy crop during *samba* season is leaf-roller. The ear head bug attacks paddy crop during the *navarai* season. Blast, helminthosporium, leaf spot and bacterial blight are the diseases which attack paddy crops in all seasons. The attack by blast and leaf spot is severe on paddy particularly during *samba* season.

Neck blast is the most serious ragi disease. The green ear or downy mildew are the two important diseases affecting cumbu. Red hairy caterpillar, leaf miner, leaf folder and aphids are the common pests which attack the ground-nut crop. The rainfed ground-nut suffers great damage from red hairy caterpillar every year. Although the leaf miner attacks both the rainfed and irrigated ground-nut, the damage seems to appear more on the rainfed crop. The leaf folder and aphids cause great damage to irrigated crop. Tikka leaf spot and the root rot attack both irrigated and rainfed ground-nut.

Sugar-cane crop in the Territory come under the attack of pests like early shoot borer, top shoot borer and pyrilla. The red rot seems to be the major disease affecting sugar-cane.

The most common pests affecting cotton are aphids, jassids, thrips and boll-worms. The fusarium wilt, the black arm of cotton or the angular leaf spot are the two important diseases affecting cotton.

The red palm weevil, black headed caterpillar and the rhinoceros beetle are the important pests affecting coconuts.

Pests like cut worms, aphids, jassids, shoot borer and fruit borer cause great damage to both tomato and brinjal. Fruit borers, cut worms and thrips cause severe damage to chillies. Root rot and fruit rot are considered to be the major diseases affecting tomato. In the case of brinjal, both wilt and little leaf virus cause great damage. The yellow mosaic virus is the most common disease affecting bendai. Wilt is the major disease affecting onion. Bunchy top and banana wilt are the most serious diseases affecting banana.

The traditional remedy for crop diseases and pests was to apply wood ash against aphids. Spraying of lime water to protect plants from caterpillars was another common practice in the villages. The burning of waste materials near the pest attacked trees was also practised in the rural areas. In recent times, however, epidemic control measures are taken up under the Plant Protection Scheme by distributing pesticides free of cost. Pest control operations are carried out by the Plant Protection Squad which covers large areas and carries out large scale prophylactic measures. The extension staff carry out inspection of the crops and prescribe the pesticides and fungicides to be applied for particular crops. Individual ryots are supplied plant protection chemicals and equipments at subsidised cost for protecting their crops from diseases and pests.

Progress under the Five Year Plans:

The subject of agriculture was the concern of the agricultural wing of Service Economique till merger. An independent Directorate of Agriculture was established in the year 1956, the last year of the First Five Year Plan. As such, no appreciable results could be achieved during the I Plan period in the field of agriculture.

II Plan : At the time of merger, the Territory was deficient even in the matter of rice which was the staple food of the vast majority of its people, the annual deficit of rice amounting to 8,000 tonnes. Hence in the strategy of planning, agricultural programmes received a pride of place. The objective was to achieve self-sufficiency in food. A sum of Rs. 13.42 lakhs was earmarked for agriculture in the II Plan. Total expenditure amounted to Rs. 11.49 lakhs. The Seed Multiplication and Distribution Scheme, the Fertilisers Distribution Scheme, the Plant Protection Scheme and the Bore-well Scheme formed the main programme of action during the period, all aimed at increasing food production in the Territory. Agricultural production is estimated to have increased by about 30 per cent. during the II Plan period. The production of rice was estimated to have risen by 9.3 per cent. whereas total food production was said to have risen by 10.1 per cent. between the years 1955-1961.⁴³ In other words food production was estimated to have risen from 34,700 tonnes in 1956 to 42,000 tonnes in 1961. By the end of the II Plan, the Territory's export (9,443 tonnes) of rice was more than its imports (8,633 tonnes). The establishment of a sugar factory in 1960 gave a boost to the cultivation of sugar-cane, the production of which increased from 3,583 tonnes in 1956-57 to 1,17,442 tonnes in 1959-60.

III Plan : During the III Five Year Plan, 23 development schemes were taken up for implementation. Although a sum of Rs. 38.52 lakhs was earmarked for agriculture, actual expenditure amounted to Rs. 46.84 lakhs. Significant increase was registered in the area under sugar-cane. The Intensive Rice Cultivation Scheme, extended to the Territory in 1963, was implemented in Pondicherry and Karaikal regions with a view to increasing food production through what was called the intensive adoption of package of practices. Two State Seed Farms were established, one at Madagadipattu and another at Mathur in Pondicherry and Karaikal regions respectively for the production of good quality seeds. An Experimental Research Farm and an Orchard-cum-Nursery each were also established at Mathur and Madagadipattu.

Coconut nurseries were set up in all the four regions for the supply of good quality coconut seedlings to the ryots. Agricultural credit facilities were extended to the ryots for the purchase of tractors, electric motor pump sets and for sinking bore-wells under the Takkavi Loan Scheme. Under the Plant Protection Scheme, measures for plant protection were taken up on a large scale. The Experimental Research Farm at Kirumambakkam was, however, closed down on 30 September 1969. A scheme for vegetable development, which formed part of the Horticulture Development Scheme, was also taken up for implementation in 1967. As the result of the implementation of these development schemes food production, which was 42,000 tonnes at the end of the II Plan, rose to 56,056 tonnes by the end of the III Plan. Sugar-cane production which stood at 1,26,000 tonnes in 1961-62 rose to 1,64,000 tonnes in 1964-65.

In 1965, the National Council for Applied Economic Research called for a change in the agricultural policy of the Territory. The Council said that the hitherto laid emphasis on self-sufficiency should be altered. The new strategy suggested was that while the output of paddy may be maximised by increasing the per hectare yield in the existing or less land, greater attention should be paid on increasing the output of cash crops for which the area was eminently suitable. This was felt particularly important because the Territory was almost bereft of power and natural resources. Added to this, the high pressure of population made it imperative that cash crops which yielded a greater income directly to the cultivated and could indirectly help its industrial development should be popularised on a large scale. According to the Council, there was scope for increasing the area under cash crops such as sugar-cane,

ground-nut, cotton, spices, condiments, plantain, gingelly, cashewnut, etc. It was further suggested that this should be done by limiting the area under low value crops such as food grains or even by marginally reducing it and increasing the area under commercial crops. The criterion for choosing the superior crops was to be based roughly on the higher value of output per hectare. The Council, therefore, suggested that the following cropping pattern should be brought about in Pondicherry and Karaikal regions by 1976:

Suggested cropping pattern 1975-76

(In hectares)

Crops	Pondicherry		Karaikal	
	1961-62	1975-76	1961-62	1975-76
Paddy	14,388	15,000	14,875	16,000
Other cereals	5,002	4,000	—	—
Pulses	294	1,000	261	1,000
Total food grains	19,684	20,000	15,136	17,000
Chillies	47	400	9	100
Coriander	30	450	—	50
Sugar-cane	1,416	3,500	—	—
Cashewnuts	235	600	—	200
Ground-nut	3,935	4,500	—	—
Gingelly	656	1,000	17	100
Coconut	408	750	108	400
Other crops	2,126	1,300	125	330
Total cropped area	28,539	33,240	15,395	18,180

The National Council for Applied Economic Research suggested the reduction of area under millets and increase in the area under pulses, especially because these leguminous crops added to soil fertility. An increase in the area under fodder, the planting of coconut trees on the borders of fields, growing of cashewnut trees on dry land and along the sea coast both in Pondicherry and Karaikal, increasing the area under pulses were also recommended. It pointed out that the waste lands and fallows and even some of the lands classified as not fit for cultivation could be used for casuarina plantation, provided irrigation facilities were made available initially. There was scope for increasing the sugar-cane yield to 1,00,000 kg. per ha. by 1975 chiefly by applying more fertilisers and by using improved strains. The Council also drew attention to the fact that the additional potential for the farm output could not be fully exploited unless other measures such as land reforms, consolidation of holdings, strengthening of extension service and provision of ample agricultural credit, etc. were introduced simultaneously.

The N.C.A.E.R. cautioned that no effort and outlay should be wasted on schemes that contributed little to the output levels or to the production efficiency of the people.⁴⁴ According to its own estimate, agricultural production programmes for the decade 1966-75 would require an investment of Rs. 210 lakhs in all, Rs. 84 lakhs being in the public sector and Rs. 126 lakhs in the private sector. The value of output was expected to more than double between 1960-76. The gross value of agricultural output which stood at Rs. 401 lakhs in 1960-61 was estimated to reach Rs. 850 lakhs by 1975-76 (at 60-61 prices) giving a growth rate of 6.35 per cent. over the decade.

Annual Plans : The subsequent three years i.e. from 1966 to 1969, however, marked the period of annual plans. The schemes or projects implemented during this period were chiefly those which were left incomplete during the III Plan, besides those envisaged for implementation under the IV Plan.

The Vocational Agricultural School (with a 3.296 ha. farm attached to it) was started on 1 July 1967 at Mathur in Karaikal region. To begin with, the school admitted twenty students for the one-year course, each student being paid a stipend of Rs. 50 plus Rs. 5 for pocket money.⁴⁵ The annual intake of students was fixed at 20. Admission was restricted to students from agriculturist families.

The Soil Testing Laboratory located within the Botanical Garden campus was commissioned in March 1968 with the object of testing, free of cost, the soil samples from farmers' fields, recommending optimum fertiliser doses for different crops and also testing the suitability of water for irrigation purposes.

The Comprehensive Scheme for the Development of Sugar-cane was implemented in Pondicherry region from 1968 onwards, out of the cess fund collected from the sugar factories. The Horticulture Development Scheme was also implemented for increasing the production of banana, mango, vegetables and cashew, besides supplying fruit planting materials at subsidised rates.

Zonal Nucleus Farms were set up on leased lands or government lands, as the case may be, from year to year. A separate Arecanut and Pepper Development Scheme was launched in Mahe region for the development of arecanut and pepper crops. The Coconut Development Scheme was implemented in Yanam region for the production and supply of good quality coconut seedlings to the ryots of Yanam region.

IV Plan : A shift in the strategy of agricultural development during the IV Plan was noticeable. It aimed at increasing food production through intensive cultivation measures rather than by increasing the area under cultivation. Out of the total area of 46,822 ha. in this Union Territory, the net area sown by the end of the III Plan was of the order of 32,700 ha., the remaining area being accounted for by permanent pastures, land under miscellaneous trees, groves, cultivable waste lands, etc. There was not much scope for expanding the cropped area in this Territory and efforts were, therefore, directed towards intensive cultivation practices, adoption of remunerative cropping patterns and improved cultivation practices, etc.

Various development schemes involving an outlay of Rs. 81.62 lakhs were implemented during the Fourth Plan. The I.A.A.P. was extended to all the four regions of the Territory. An Agricultural, Engineering, Repair and Maintenance Workshop was set up at Pondicherry in October 1975 for carrying out repairs to all types of agricultural machinery.

A Seed Testing Laboratory was established in November 1972. The same year, a Quality Control Laboratory was added to the Soil Testing Laboratory. The Mobile Soil Testing Laboratory, the Pesticide Testing Laboratory and a Ghee and Oil grading Laboratory were established in January 1973 for analysing samples for quality control.

The Centrally sponsored on Multiple Cropping Programme was also implemented in the IV Plan.

The need for establishing an efficient marketing system for the agricultural products was also realised and the Pondicherry Agricultural Produce Markets Bill was framed for the purpose. ⁴⁶ The bill, as passed by the Assembly, received the assent of the Lieutenant-Governor on 28 March 1974.

The first Agricultural Polytechnic (Krishi Vigyan Kendra) of India was established at Pondicherry in 1974 to train middle level technicians in the field of agriculture and allied pursuits. (Vide 'Krishi Vigyan Kendra' under Chapter XV)

Although a proposal for setting up a Model Agronomic Research Station in the Territory was mooted as early as 1969, proceedings for acquiring 18 hectares of land for the Research Station at Kariyamanikkam could be completed only in 1976. Here seed multiplication of sugar-cane is undertaken to supply quality seed material to the ryots.

The estimated annual growth rate of agricultural income was 10.5 per cent. during the IV Plan. While the estimated requirement of food grains at the end of the IV Plan was placed at 70,000 tonnes, anticipated production was placed at 1,20,000 tonnes leaving a surplus of 50,000 tonnes. Even if the production level is maintained at the same level during the V Plan and the requirement rises to 80,000 tonnes, the Territory will be left with a surplus of 40,000 tonnes. Sugar-cane production increased to 2,00,000 tonnes by the end of the IV Plan.

V Plan : The Fifth Plan aims at increasing the area and production of commercial crops sacrificing a part of the present area under food grains without contributing to any loss in the level of its production. The area under sugar-cane which fluctuates around 1,800 ha. is to be increased to 4,000 ha. making available the raw material for a second sugar mill proposed under the co-operative sector in the Territory. The Territory is surplus in the matter of sugar which would increase further by the end of the Fifth Plan.

The area under oil-seeds is to be increased from 4,800 ha. to 6,000 ha. (1979), and pulses from 6,000 ha. to 8,000 ha.

Between 1974 and 1979 the cropping pattern is designed to shape as follows :

(In hectares)

	1974	1979
Paddy	36,000	30,000
Bajra	4,400	2,800
Ragi		
Other millets		
Sugar-cane	1,800	4,000
Ground-nut	4,800	6,000
Other oil-seeds including sunflower		
Pulses	6,000	8,000
Cotton	1,800	3,600
Vegetables	800	2,400
Other yielding fruits	480	1,600
Coconut	1,520	1,600
Gross cultivated area	57,600	60,000

It could be seen from the above statement that the gross area cultivated is expected to increase only by 2,400 ha. between 1974 and 1979. The additional 2,400 ha., it is said, will represent the area which will come under long duration crops like sugar-cane and banana. The Fifth Year Five Plan Approach Paper propounds a new agriculture policy viz. a policy of evening out regional disparities.

IV. Animal husbandry

Introductory:

The agricultural economy of the Territory is based on the system of mixed-farming under which the cultivable land is utilised for the production of food grains, while its by-products such as straw, etc. are used for feeding the cattle attached to the farm, mainly as draught animals. They also held produce farm-yard manure. The agro-climatic conditions of the Territory are very much similar to those of the adjoining states.

The livestock sector contributed very little towards income generation in this Territory. The contribution was even smaller than in the neighbouring State of Tamil Nadu where livestock was relatively less important. The share was below 0.9 per cent. in the Territory in 1960-61 as against 1.8 per cent. in Tamil Nadu and 8 per cent. for All India. This was so because of the poor quality of the local cattle and also the larger number of goats whose economic value was low. The Territory had no good quality breed of cattle and the feed supplied to the livestock population was deficient both in quality and quantity.

Prior to merger, there was no separate out-fit to deal with livestock services in the Territory. There were also no qualified persons to man the services in the initial stage. All that existed was a skeleton staff attached to the Public Health Services in Pondicherry to attend to veterinary functions. The origin of this wing is traced to 1935 when there was a male nurse (vet.) and an attender to attend to the animals. Only during periods of outbreak of cattle diseases, prophylactic measures were taken for the control of such outbreaks. By about 1945, this wing which functioned in the premises of the Government Pharmacy moved out to Orlayanpet. The Veterinary Wing was placed under the care of a Veterinary Surgeon who also attended to the duties of the municipal slaughter house. In 1948, another Veterinary Hospital was opened at Karaikal for the treatment of animals and to attend to the duties of the slaughter house there. It was about this time that concepts of breed development and preventive inoculation, etc. were gaining ground all over India.

Since 1948, the services of Veterinary Assistant Surgeons were obtained from Tamil Nadu. Soon after merger, the Veterinary Wing started functioning as a separate unit with a Veterinary Officer in charge of the Veterinary Hospital in Pondicherry and a Veterinary Assistant Surgeon in charge of the

hospital at Karaikal. A band of stockmen compounders brought from Tamil Nadu on deputation along with the veterinary surgeons helped to organise the veterinary services in the Territory.

In 1955 the Veterinary doctor in Pondicherry was declared as Veterinary Officer with jurisdiction over all the four regions. From June 1955, the Veterinary Unit came to be known as the Directorate of Animal Husbandry and the officer-in-charge came to be designated as Director of Animal Husbandry. It is noteworthy that in 1956 a scheme for the grant of six scholarships to citizens of Pondicherry to pursue the B.V.Sc. course was sanctioned in an attempt to attract more students to the profession which had till then not caught their imagination.⁴⁷ Schemes for the improvement of the local livestock and setting up of poultry farms formed part of the I Plan Programme. While the II Plan outlay on Animal Husbandry was Rs. 6.62 lakhs, total expenditure amounted to Rs. 5.67 lakhs. The III Plan outlay stood at Rs. 14 lakhs while expenditure amounted to only Rs. 10.50 lakhs. This shortfall occurred mainly due to the delay in setting up the proposed State Poultry Farm and Piggery Unit.

In 1965 the National Council for Applied Economic Research proposed that the total outlay should be raised to Rs. 25 lakhs in the IV Plan and to Rs. 30 lakhs in the Fifth Plan.⁴⁸ While outlay under the IV Plan was Rs. 29.00 lakhs, V Plan outlay amounted to Rs. 72.40 lakhs.⁴⁹

Livestock population :

The preliminaries for conducting a livestock census in the Territory were completed in February 1960 and the first regular Livestock Census was conducted here as part of the Ninth All-India Quinquennial Livestock Census in 1961. The livestock population of this Territory as revealed by the Livestock Census 1972 was 1,52,646, of which 1,03,374 were found in Pondicherry region, 43,649 in Karaikal region, 2,891 in Mahe region and 2,732 in Yanam region. Out of the total livestock population in the Union Territory, bovine stock forms the largest group numbering as many as 1,01,712 (89,602 cattle and 12,110 buffaloes) representing 66.63 per cent. of the total livestock population. This is followed by ovine stock which number in all 48,787 (41,731 goats and 7,056 sheep) forming 31.96 per cent. (goats 27.34 per cent. and sheep 4.62 per cent.) of the total livestock population. As regards animals viz. horses, ponies, donkeys and pigs, they number 2,147 forming 1.41 per cent. of the livestock population. Detailed regionwise particulars of livestock population in the Territory are given in the following table:

Region wise particulars of livestock population between 1961—1972.

					1961	1966	1972
Cattle	Pondicherry	..	..	..	55,316	48,786	64,772
	Karaikal	..	..	..	21,640	19,960	22,115
	Mahe	..	..	..	1,156	1,204	1,292
	Yanam	..	..	..	1,478	1,599	1,423
	Total	..	..	..	79,590	71,549	89,602
Buffaloes	Pondicherry	..	..	..	5,582	3,998	6,426
	Karaikal	..	..	..	5,299	6,029	5,143
	Mahe	..	..	..	2	5	10
	Yanam	..	..	..	482	541	531
	Total	..	..	..	11,365	10,573	12,110
Sheep	Pondicherry	..	..	..	6,443	6,326	6,101
	Karaikal	..	..	..	1,240	732	802
	Mahe	..	..	..	—	42	—
	Yanam	..	..	..	367	—	153
	Total	..	..	..	8,050	7,100	7,056
Goats	Pondicherry	..	..	..	20,141	17,252	24,185
	Karaikal	..	..	..	13,767	13,466	15,401
	Mahe	..	..	..	1,482	1,282	1,588
	Yanam	..	..	..	111	180	557
	Total	..	..	..	35,501	32,180	41,731
Horses and Ponies	Pondicherry	..	..	..	95	55	11
	Karaikal	..	..	..	25	9	39
	Mahe	..	..	..	2	—	—
	Yanam	..	..	..	8	9	11
	Total	..	..	..	130	73	61

Donkeys	Pondicherry	..	..	..	246	171	187
	Karaikal	..	..	..	3	6	8
	Mahe	..	..	..	—	—	—
	Yanam	..	..	..	—	—	—
	Total	..	..	..	249	177	195
Pigs	Pondicherry	..	..	..	963	1,639	1,692
	Karaikal	..	..	..	150	101	141
	Mahe	..	..	..			1
	Yanam				48	1,788	1,891
	Total				1,161	1,788	1,891

The above statement shows that the number of cattle in the Territory had declined from 79,590 in 1961 to 71,549 in 1966. The rapid mechanisation of agriculture reduced the dependance of farmers in bullocks which were sold away. Moreover, the process of selective breeding and management also induced the sale of uneconomical and unproductive animals in the Territory.

The important species of livestock prevalent in the Territory are cattle, buffaloes, sheep, goats, horses, ponies, donkeys and pigs. The proportion of cattle and goats in the Territory is relatively much higher and of sheep lower compared to Tamil Nadu.

Livestock conditions :

The Territory is not a breeding tract of any good quality livestock and the cattle are mostly of a non-descript variety. However, various breeds and their crosses are met with here. Only popular local breeds of cattle are utilised for agricultural purposes and draught operations. Bullocks continue to be the main source of draft power for agriculture. They are also used for ploughing and carting and sometimes for drawing water from wells for irrigation. Only recently well irrigation is being carried out manually or by pump sets. The Umbalacherry type of work animals is common in Karaikal only. The Kangeyan breed of work animals is also popular, followed by Mysore

breeds like Hallikar and Amrithambal. As regards milch cows, no definite breed types are predominant, although various grades of Jersey and crosses as well as Holstein Fresian are preferred in Pondicherry. As the result of the work carried out under the Key Village Scheme, various grades of Sindhi assumed preponderance over other grades and crosses. Since 1970 Jersey Cross breeds were popularised in the area. In Mahe and Yanam regions all except very few are non-descript.

Buffaloes mostly of local varieties are reared for milk purposes. Various grades of Murrah breed are also very common. The exotic varieties that are reared for milk are Sindhi, Ongole, Mysore, Jersey and cross breed Murrah buffaloes.

Cattle are generally housed in small ill-ventilated thatched sheds, although in urban areas they are better cared for than in rural areas. Buffaloes are mostly allowed to remain in the open. Tiled sheds can also be met with. The ryots are increasingly being persuaded to build better and well ventilated sheds through subsidy under the Community Development Programme.

The paucity of additional land for cultivation, combined with the high pressure of population on land, makes it imperative that the livestock sector is properly organised and improved in an attempt to supplement the income of the families and to provide part-time work to the under employed in the Territory. The absence of high breed cattle, lack of fodder resources and an efficient marketing organisation were said to be the main deterrents to the growth of this sector in the Territory. The National Council for Applied Economic Research gave a graphic description of the state of animal husbandry in 1965 in the following words: "The local animals are very poor in quality. They are of non-descript variety and there is no good breed available locally. That apart, there is a great deficiency of cattle feed both in fodder and concentrates. In the entire rural area there is no practice of feeding concentrates to the cattle; only a few persons give oil cake. The area under pasture and grass land and that under fodder cultivation is practically negligible. The main food is the rice husk, which too is not adequate for the large cattle population. It is only in towns that well fed cattle of good breed are found. The average milk yield of cow is a little over two lbs. There is no organised dairy in the State for milk supply to the public. Good milk is rare." The Council further said that fodder deficiency was very serious, and pointed out

that unless fodder cultivation was commercially undertaken this deficiency was likely to continue. The Council, therefore, called for an integrated programme of cattle development. Explaining the expression 'integrated planning', it said that "in the selected areas where the scheme of upgrading the cows is introduced, enough area should be brought under fodder and also proper arrangements made for the collection and marketing of the milk". Conditions have improved since then. Today, the Territory has the benefit of a well established modern dairy. The milk trade is well organised under the co-operative sector. The exotic cross breed calf is almost an ubiquitous factor of the village stratum.

Key Village Centres:

In keeping with the policy that in areas of non-descript type of cattle, cattle improvement must be effected by grading up the local stock by high grade Sindhi bulls, an infrastructure was sought to be built by establishing Key Village Centres in the Territory. The Pondicherry Key Village Centre was started on 10 December 1956 and the Karaikal Key Village Centre, on 19 November 1957. According to the original pattern, a Key Village Centre was to be provided for a block of 10,000 breedable cow population. But in Pondicherry region alone the breedable population exceeded 25,000 and hence the operations of the Key Village Centre could not cover the entire cattle population. The Pondicherry Centre was, therefore, expanded to cover areas hitherto left uncovered. The Bahur and Tirukkanur Dispensaries and the Veterinary Aid Centres at Thimmanayakenpalayam and Katterikuppam also perform the functions of a Key Village Unit, each under the care of a qualified Livestock Assistant. At present there are three Key Village Centres, two in Pondicherry and one in Karaikal, with 23 and seven Key Village Units attached to them respectively.

Details of all Key Village Units in the Territory are furnished below

<i>Sl. No.</i>	<i>Key Village Units</i>	<i>Commune</i>	<i>Attached to</i>
1.	Pondicherry-Valakulam	Pondicherry	Key Village Centre, Pondicherry.
2.	Thengathittu	Mudaliyarpettai	"
3.	Ariyankuppam	Ariyankuppam	"

<i>Sl. No.</i>	<i>Key village units</i>	<i>Commune</i>	<i>Attached to</i>
4.	Tavalakuppam	Ariyankuppam	Key Village Centre, Pondicherry.
5.	Thimmanayaken- palayam	Ariyankuppam	Veterinary Aid Centre, T.N. Palayam.
6.	Reddiyarpalaiyam	Ozhukarai	Key Village Centre, Pondicherry.
7.	Mettuppalaiyam	Ozhukarai	"
8.	Karuvadlkuppam	Ozhukarai	"
9.	Kalapet	Ozhukarai	"
10.	Bahur	Bahur	Veterinary Dispensary, Bahur.
11.	Seliyamedu	Bahur	"
12.	Kirumambakkam	Bahur	"
13.	Karaiyamputtur	Bahur	"
14.	Kariyamanikkam	Nettappakkam	Rural Artificial Insemination Centre, Kariyananikkam.
15.	Madukkaral	Nettappakkam	"
16.	Pudukkuppam	Nettappakkam	"
17.	Villiyannur	Villiyannur	Veterinary Dispensary, Villiyannur.
18.	Uruyaiyar	Villiyannur	"
19.	Tondamanattam	Villiyannur	"
20.	Sedarappattu	Villiyannur	"
21.	Tirukkanur	Mannadippattu	Veterinary Dispensary, Tirukkanur.
22.	Tiruvandarkovil	Mannadippattu	"
23.	Katterikuppam	Mannadippattu	Veterinary Aid Centre, Katterikuppam.
24.	Karaikal	Karaikal	Key Village Centre, Karaikal.
25.	Villidiyur	Niravi	"
26.	Niravi	Niravi	"

<i>Sl. No.</i>	<i>Key village units</i>	<i>Commune</i>	<i>Attached to</i>
27.	T.R. Pattinam	T.R. Pattinam	Key Village Centre, Karaikal.
28.	Nedungadu	Nedungadu	Veterinary Dispensary, Nedungadu.
29.	Kottuchcheri	Kottuchcheri	„
30.	Tennagudi	Tirunallar	Veterinary Dispensary, Tennagudi.
31.	Mahe	Mahe	Veterinary Aid Centre, Mahe.
32.	Pallur	Mahe	Veterinary Dispensary, Mahe.
33.	Yanam	Yanam	Veterinary Dispensary, Yanam.
34.	Adivipolam	Yanam	Veterinary Aid Centre, Adivipolam.

It is to be noted that there are no livestock breeding farms, either state managed or private, in the Territory. Added to this, there are no institutions devoted to livestock research, training and veterinary education to boost up measures designed to improve the quality of breeds or productivity of livestock in the Territory.

At the initial stages of the Key Village Scheme there was an acute shortage of high pedigree bulls. Hence, artificial insemination was adopted as the chief mode of breeding. It was later decided to provide natural service in the Key Village Centres. Pedigree bulls were supplied to farmers free of cost under certain conditions, supported by a maintenance grant for their proper upkeep.

Schemes for improving the genetic quality in relation to production potential of cattle also received attention in the Territory. Under one such scheme, pedigree breeding bulls were supplied to farmers, free to cost, together with a reasonable maintenance grant. Between 1959 and 1969, the department supplied 39 bulls in Pondicherry and Karaikal regions after which there was no demand for the same, since by that time, practically all the villages were covered by the Key Village Scheme. This scheme was, therefore, discontinued in 1969 as it was no more found useful.

The result of the insemination programme which was popularised in the Territory since 1955 was found not commensurate with the expenditure incurred. Following the all-India study of the problem, it was decided that cross breeding of the local cows with exotic bulls of high potential should be preferred to the policy of grading-up hitherto followed. Subsequently the Pondicherry Key Village Centre switched over to cross breeding with Jersey semen along with Sindhi-Murrah bulls. This programme sought to eliminate the use of Sindhi bulls and to cover the entire region by 1972. The scheme was then extended to other regions as well.

Calf rearing is another important programme implemented under the Key Village Scheme. A large number of newly born female calves are selected for subsidised rearing under the scheme. The farmers are paid at the rate of Rs. 10 per month for rearing their calves from the 6th to 24th month.

Artificial Insemination Centres :

The cattle population in Mahe and Yanam being very small, these two regions have not been provided with separate Key Village Centres. Instead, they are provided with Urban Artificial Insemination Centres which are located at Pallur (Mahe) and Yanam. The only Rural Artificial Insemination Centre is located at Kariyamanikkam. Insemination service is offered also by the Veterinary Dispensaries at Tirukkanur and Bahur, at the Veterinary Aid Centres attached to the Veterinary Dispensaries at Pallur and Yanam and by the Veterinary Aid Centres at Thimmanayakenpalayam and Katterikuppam. In terms of coverage of breedable population, it may be stated that 50 per cent. of the breedable animals in Pondicherry and 25 per cent. in Karaikal have been brought under artificial insemination. The entire livestock in Mahe has been efficiently covered by artificial insemination while the coverage is poor in Yanam.

Animal diseases :

Communicable diseases : Foot and mouth disease, rinderpest, haemorrhagic septicaemia, black-quarter and anthrax are the prevalent communicable diseases in Pondicherry region. Rabies is also common. T.B. is rarely noticed. So also Johne's disease and protozoan diseases. Other infectious diseases like mastitis and calf scour are common. Chronic bovine lymphagitis is

occasionally noticed. Other contagious/non-contagious diseases that affect the livestock in the Territory are lymphangitis, catarrhal enteritis, ephemeral fever, nasal schistosomiasis, piroplasmosis, eczema, besides fits and blindness in new born calves.

The diseases mainly prevalent among goats in Mahe are mastitis (wet gangrene), dystokia, retained placenta and verminous pneumonia and bronchitis. Bovine and canine diseases are the same as in other regions.

Fowlpox, coccidiosis, paralysis, coryza, diarrhoea and ranikhet are the diseases that often attack the fowls in epidemic form in all the four regions. Large scale vaccination of breeds against ranikhet and fowlpox has considerably reduced the incidence of mortality of fowls due to epidemics. The Rinderpest Eradication Programme launched in 1969-70 has not only brought down the mortality rate but also totally checked the incidence of the disease in the Territory.

Non-communicable diseases : Dyspepsia, enteritis, bronchitis, bloat, urinary calculi, etc. are the diseases that often attack livestock in all the four regions. Worm infestation is also very common. The nature of cases treated in Pondicherry and Karaikal are more or less the same.

Veterinary hospitals/dispensaries :

The Pondicherry Veterinary Hospital (Orlayanpet) is provided with all modern equipments, including X-ray facilities. The Mobile Veterinary Dispensary with headquarters at Pondicherry visits remote areas according to routine schedules. In 1966, a Clinical Laboratory was set up at Pondicherry to facilitate prompt diagnosis and correct treatment of diseases.

In Karaikal region, the Veterinary Hospital originally located at Settur was subsequently shifted to Karaikal town. The Mobile Veterinary Dispensary attached to it serves the remote areas of Karaikal. The Veterinary Dispensaries in Pondicherry region are located at Kariyamanikkam, Bahur, Tirukkanur and Villiyannur. In Karaikal region, they are located at Nedungadu and Tennagudi. Mahe region has the facility of a Veterinary Dispensary at Pallur started in 1956 and a Veterinary Aid-Centre at Mahe town established in 1970. Nearly half of the cases treated here are bovines, buffaloes being practically nil. Goats in Mahe are good milk yielders. Hence their treatment assumes some importance here.

The Veterinary Dispensary in Yanam was established in 1956 and the Veterinary Aid Centre at Adivipolam in 1969. Here buffaloes form about 50 per cent. of the cases treated.

Goshalas :

Another important scheme aimed at improving the quality of the stock was the establishment of Goshalas in the Territory. One such Goshala was maintained by the Tirunallar Devasthanam and another by Viyomashram in Villiyanur. Both the institutions were supplied with 10 cross breed cows and one Sindhi bull. The grant-in-aid and subsidy thus granted to these institutions amounted to Rs. 25,000 each. As the results were not found encouraging, the opening of more goshalas in the Territory was abandoned. There are no Goshalas to help segregate old and disabled animals in the Territory.

Fodder and grazing conditions:

The prevalent impression is that there are no common grazing grounds in the Territory, although there are indications of the existence of common grazing grounds in many villages. The present fate of these grazing fields is not known, for want of precise data.⁵⁰ It would, perhaps, require some effort to identify these grazing fields from land records. The grass yield in the pastures, mostly porambokes, is low because of unregulated grazing. Apart from these common grazing grounds, there are small chunks of single crop lands in Pondicherry region that are kept fallow between harvest and transplantation to allow cattle to graze. In Karaikal region, grazing facilities are extremely limited as most of the area is under paddy cultivation. In-between harvest and transplantation, lands are sometimes utilised for grazing purposes, but no fodder crop is cultivated for want of irrigation facilities during the third crop season. The system of mixed farming had a dampening effect on fodder cultivation in both these regions. There are no lands available for fodder cultivation in Mahe. As a general practice cattle are allowed to graze on river bunds and in paddy fields after harvest.

Apart from grass, paddy, ragi and cholam, straw is also used as cattle feed. Especially during the dry season, straw becomes indispensable as feed for livestock. Concentrate feeds such as ground-nut, oil cake, bengalgram, husk, ragi flour, horsegram, wheat, rice bran as well as cotton seeds are utilised as animal feeds. Guinea and Napier grasses are also fed to the animals.

In 1965 the National Council for Applied Economic Research pointed out that in order to increase the fodder supply for the livestock which was very essential for improving their quality, the area under fodder crop should be increased to at least 1000 ha. by 1975. The report further suggested that even some of the irrigated lands could be used for growing fodder crops which would bring a better return than some of the millets. It was also pointed out that grass yield could be substantially stepped up by proper management and fencing of grazing fields in the Territory.

The fodder development programme was launched in the Territory only during the III Plan period. The idea was to evolve a new regimen suited to fit into the agricultural practices based on crop husbandry and at the same time be efficient enough to prove the comparative economy of fodder cultivation vis-à-vis cereal crops. Specified quantities of fodder *chulam* or *trungu chulam* were supplied to the ryots at half cost together with subsidies to encourage fodder cultivation in the Territory. The Directorate of Animal Husbandry started distributing cowpea since 1972 which was sought after very much by the ryots because of its higher yield. Similarly grass slips-both root slips and stem cuttings-are also distributed at subsidised rates. Details of area under fodder cultivation since 1969 are furnished below :

			No. of ha. under fodder cultivation	No. of grass slips supplied
1969-70	..	..	40.00	9,500
1970-71	..	..	62.80	1,81,000
1971-72	..	..	71.60	1,62,000
1972-73	..	..	68.80	20,100
1973-74	..	..	91.00	35,000

The benefits of balanced feeding was sought to be popularised through propaganda, supplies and services. By 1961-62 balanced ready mix cattle feeds were made available in Pondicherry and Karaikal by private manufacturers. From 1967 the Co-operative Milk Supply Society started supplying ready mixes to its members. Subsidised supply of complete balanced ready mix

cattle feed was introduced in Mahe block from 1963. Between 1960 and 1966, the Directorate supplied mineral mixtures and vitamin supplements to cattle owners at very cheap rates. Nowadays, the Co-operative Milk Supply Union and the dairy farmers resort to their purchase in the local market where they are freely available.

Dairy farming:

No proper survey has so far been conducted to estimate the milk yield rates of the various categories of livestock in the Territory. The majority of the cattle being of the non-descript type and under-nourished, their milk yield is generally very low. The cows are generally milked twice a day. According to an estimate worked out in 1965-66 based on the yield rate of milk in Tamil Nadu, the yield rate of different breeds of cattle in the Territory was as follows :

	Litres
1. Sindhi cow	5.0
2. Cross breed cow	6.5
3. Local breed cow	2.0

On that basis, production of milk in the Territory was reckoned as follows :

	Quintals
1. Cows' milk	57,625
2. Buffaloes' milk	25,252
3. Goats' milk	1,257
Total	84,134

Regionwise details of milk production in 1965-66 were as follows :

(In quintals)

	Pondicherry	Karaikal	Mahe	Yanam	Total
Cows' milk	37,810	16,571	1,535	1,709	57,625
Buffaloes' milk	9,444	14,129	25	1,654	25,252
Goats' milk	640	552	60	5	1,257
Total	47,894	31,252	1,620	3,368	84,134

The estimated output of different milk products in the Territory is given below :

Ghee	..	1,355	quintals
Butter	..	32	..
Curd	..	10,651	..

On the basis of the estimated production of milk for 1965-66, and the then projected population (estimated population as on 1 March 1966) the per capital availability of milk worked out to 59 grams *per diem*.

The most conspicuous achievement under livestock development in Pondicherry is the success of the co-operative movement in dairy-farming, although in 1965 the National Council for Applied Economic Research pointed out that the absence of a dairy scheme was an important lacuna in the livestock development programme of the Territory. The Centre further pointed out that without an organised dairy for collecting milk from the villages, there cannot be any proper incentive for the villagers to improve the breeds. In fact until the year 1966 there was no organised dairy in the Territory. Now, all the regions except Yanam have organised Co-operative Milk Supply Services.

The Pondicherry Dairy (Kurumbettai) started functioning with effect from 12 April 1971. The pasteurisation plant which started functioning with an initial target of 10,000 litres per day is expandable to 22,000 litres per day.

In Karaikal and other regions, cooling and pasteurisation are not being carried out at present. The volume of transaction in Karaikal is considerable but the handling is complicated due to fluctuation of output between the lean and flush seasons. The production of milk in the flush season is about 2,000 litres and in the lean season only about 800 litres in Karaikal.

Besides the co-operative milk supply societies, there are a large number of private milk vendors who have their own purchase and sales network in the Territory. Although they carry on a flourishing business they do not process the milk. They sell their entire collection as whole milk.

Abattoirs :

There are three slaughter houses ⁵¹ [Pondicherry-Ambedkar Nagar, Karaikal (rue Thomas Aroul) and Nellithope]. The meat inspection work at the Pondicherry Abattoirs is carried out by a veterinarian specially appointed for the purpose. The Report on Livestock Census 1966 drew pointed attention to the fact that the slaughter houses call for improvement in order to produce and sell good quality meat under hygienic conditions to the general public. Schemes for the improvement of the slaughter houses were said to be under the consideration of the municipalities concerned. The slaughter of young, very old and pregnant animals are not allowed in the Territory.

The statement below gives the estimated production of meat regionwise during 1965-66: ⁵²

(In quintals)

Category of meat	Pondicherry	Karaikal	Mahe	Yanam	Total
Mutton (Sheep and Goat)	1,150	693	62	11	1,916
Beef	471	193	11	15	690
Buff. meat	93	140	—	13	246
Pork	140	9	—	4	153

The output of bones was placed at 1,881 quintals. Although there were a few bone crushing mills during the French period there are none at present in the Territory.

The annual availability of skins and hides regionwise is given below: ⁵³

Category of hides and skins	Pondicherry	Karaikal	Mahe	Yanam	Total
Cattle hides	4,927	2,016	103	180	7,226
Buff. hides	460	693	—	63	1,216
Sheep skins	2,524	292	—	17	2,833
Goat skins	7,763	6,060	576	82	14,481

While meat is consumed locally, raw materials such as hides, skins, bones, horns, etc. are bought by dealers from Tamil Nadu for further processing. Some years ago, however, a small quantity used to be retained for tanning.

Sheep and Goat Development :

In Pondicherry and Karaikal, a good number of sheep and goats are of a low quality with poor yield and growth. Mahe region, however, forms part of the breeding tract of the famous Tellicherry breed of goats. It is rightly called the "poor man's cow" because it yields more milk than the local cow and that too at a cheaper cost of feeding. No part of the Territory is suitable for rearing wool quality sheep.

The absence of good quality goat and sheep made it imperative to develop a well maintained stock and also to improve the growth rate of sheep and their mutton quality. Naturally the problem of improving the standard of sheep and goats received attention under the II Plan.

Tellicherry bucks were procured from the breeding tract and made available to the public in exchange for the local non-descript breeds. Similarly high yielding and quick growing Nellore rams were also supplied to the public on exchange basis. While the superior breeding stock was supplied to the farmers without any extra cost, care was also taken for the proper maintenance of the stock by the farmers. This scheme proved very popular in Pondicherry and Karaikal regions. Nevertheless, farmers continued to purchase the ordinary stock from other sources. In order to counteract such a practice, the exchange scheme was continued.

Piggery Development :

The stock of pigs available in the Territory are mainly the local non-descript variety. The pork consuming population is also small. However, in order to encourage pig breeding as a profitable trade and to make available good quality pork at reasonable price to the consuming public, steps were taken to promote pig breeding in 1961. As an initial step, exotic breeding male stock was supplied to pig rearing farmers free of cost. About the same time, a Pig Breeding Unit was established as an adjunct to the State Poultry Farm at Kariyamanikkam. The Unit was intended to supply pork to the consumers.

However, there was not enough demand, and the unit had to be closed down. Those rearing pig locally do not stall feed their stock. Hence the maintenance cost is negligible enabling them to sell their stock at a low price. The Fifth Plan included schemes for renewing the attempts at introducing improved strains of pigs with emphasis on modern methods of pig rearing through methods of stall feeding.

Poultry-farming :

The common species of poultry found in this Territory are fowls and ducks. The total poultry population according to the 1961 livestock census was 1,01,614. By 1966, it rose to 1,17,661. In other words, the poultry population increased by 15.79 per cent. in the course of five years. By 1972, it increased to 1,80,343 registering a further increase of 53.27 per cent. Of these, 1,19,250 are found in Pondicherry region, 50,875 in Karaikal region, 6,431 in Mahe region and 3,787 in Yanam region. Guinea fowls, turkeys, etc which are classified as 'other poultry' number 774 and form only 0.46 per cent. Detailed statistics of the Territory's poultry population regionwise are furnished below :

		1961	1966	1972
Fowls	Pondicherry	59,129	57,267	1,13,666
	Karaikal	30,138	36,810	49,500
	Mahe	3,501	4,233	6,357
	Yanam	2,602	4,715	3,520
	Total ..	95,370	1,03,025	1,73,043
Ducks	Pondicherry	4,502	3,352	5,391
	Karaikal	475	225	801
	Mahe	17	8	67
	Yanam	61	41	267
	Total ..	5,055	3,626	6,526

		1961	1966	1972
Other poultry	Pondicherry	578	350	193
	Karaikal	601	138	574
	Mahe	—	—	7
	Yanam	10	—	—
	Total	1,189	488	774
Grand total		1,01,614	1,07,139	1,80,343

Generally White Leghorn, Australops, Rhode Island Reds, etc. are the main breeds available in the Territory in addition to non-descript desi-birds. The production of high yielding strain of birds is in the hands of private firms which mainly produce cross breeds. The major difficulty encountered is that the laying quality of birds is highly influenced by feeding practices.

The Techno-Economic Survey Report of 1965 pinpointed two hurdles hampering poultry development in the Territory viz. the un-economic size of poultry farms and lack of well developed markets.

The Directorate of Animal Husbandry resorted to the strategy of maintaining the farms as demonstration centres while catering to the needs of the area. Training courses were arranged to impart training to farmers on modern methods of scientific poultry keeping. As a result of the measures taken since merger, poultry farming has become a popular occupation among the marginal farmers and agricultural labourers and a hobby even among the well-to-do sections.

The backyard system of poultry farming is prevalent in the rural areas. The introduction of graded stock has made the avocation more profitable.

The Directorate made available to the backyard poultry raisers pedigree cocks in exchange for their local cocks in an attempt to discourage the spread of local breeds. The high yielding strains of exotic birds used for intensive farm practices were not found suitable for backyard poultry raising as they were highly susceptible to diseases.

The number of poultry farmers in the private sector is never constant as all those who take active interest do not subsist for long in the field as such efforts call for diligent attention and the introduction of techniques of scientific management. In some cases, poultry farmers give up their attempts, once departmental incentives offered at the initial stage are withdrawn. The open market fluctuations in the price of poultry feed is another threat facing the poultry farmers.

As early as 1956, a Pilot Poultry Farm was set up as an adjunct to the Pondicherry Veterinary Hospital at Orlayanpet. Exotic birds were obtained from the Indian Veterinary Research Institute at Izatnagar for the farm. The State Poultry Farm at Kariyamanikkam was set up in 1965 with a view to ensuring the supply of breeding stock and hatching eggs to the Regional Units at Karaikal, Mahe and Yanam and catering to the needs of the Pondicherry region for eggs and meat. All the regional farms served as extension units. The inadequacy of the potentials of the breeds is reported to hamper the growth of the poultry farms in the Territory.

It was found that the mortality rate of birds in the State Farms was as high as 38 per cent. in the year 1967-68. However, during 1973-74 the mortality rate came down to 9 per cent. due to better management. The farm incurred loss, due to low hatching results and high mortality rates of birds.⁵⁴

A Feed-mixing and Grinding Plant was established in September 1971 as an adjunct to the State Farm to meet its own requirements. The requirements of the Villianur Block was also met by this plant. The surplus feed manufactured by the plant is sold to the public at cost price. The requirements of Marginal Farmers and Agricultural Labourers Development Agency also came to be met by the plant in due course.

Cattle and poultry shows :

Cattle shows, calf rallies, milk yield competition and fodder yield competition have become a regular feature in recent times. Cattle and poultry shows are held every year in all the regions. These efforts have helped increase milk production, which has trebled since 1956.

Dressing plant :

The National Council for Applied Economic Research suggested in 1965, the setting up of a dressing plant in order to make available ready-to-cook poultry meat. This suggestion was later reiterated in the Evaluation Report which was submitted to the Government in 1969. ⁵⁵

Finally a dressing plant with cold storage facilities was set up in Pondicherry town on 16 November 1971. The plant not only ensures supply of wholesome poultry meat to the consuming public at fair price but also helps utilise all culled birds. The scheme is functioning successfully and is very popular. The sale price originally fixed at Rs. 6 per kg. was subsequent by increased to Rs. 9. The dressed meat is available on Sundays and important public holidays. Stocks are not adequate for supplying birds every day.

Society for the Prevention of Cruelty to Animals, Pondicherry :

The Society for the Prevention of Cruelty to Animals, Pondicherry which took shape sometime in June 1971, was formally inaugurated on 22 January 1972. Functioning under the patronage of the Lieutenant-Governor, the affairs of the Society for the Prevention of Cruelty to Animals are looked after by an executive committee. An Inspector was appointed in October 1973 to assist the Secretary of the Society. The Society for the Prevention of Cruelty to Animals receives financial assistance from the All-India Animal Welfare Board for carrying on its activities.

The Prevention of Cruelty to Animals Act, 1960 was extended to this Territory in October 1963. Proposals for enforcing the provisions of the Act were under consideration.

V. Fisheries

Introductory :

All the four maritime regions of Pondicherry Territory cover a coastline of about 45 km. with 675 sq. km. of inshore waters and also about 1,350 hectares of cultivable inland water area.

Except framing the rules for disposing of the inland water fishing rights, no significant development had taken place in this sector before merger. The fishermen had to rely on their indigenous crafts and tackles, and be content

with very poor catches. Left with meagre income to maintain their large families, they fell an easy prey to usurious middlemen who lent very small amounts during bad weather off-seasons and collected their money back with huge interest during good fishing seasons. The fishermen thus remained poor with little or no chance left to carry out improvements in their crafts and tackles. The average daily landings were very insignificant in all the regions and the annual fish production just before the transfer of the settlements to the Indian Union was only 900 metric tonnes.

The Directorate of Fisheries was set up in this Territory in November 1955 after *de facto* merger. But prior to this, the officers of the Fisheries Department of Tamil Nadu Government and the Deputy Fisheries Development Advisor, Government of India carried out a technical survey of the Territory to assess its potentialities and suggest ways for their better exploitation. Subsequently, regional offices each headed by an Inspector of Fisheries were opened in Karaikal, Mahe and Yanam.

In 1956-57 the technical staff of the Directorate carried out a rapid survey of the fishery resources of the Territory. The survey covered 27 marine and 18 inland fishing villages or hamlets with a population of about 5,000 fishermen operating 1,180 catamarans and 6,100 fishing gears. Based on the findings of the survey and the recommendations of the Deputy Fisheries Development Advisor, Government of India, schemes were formulated to improve the crafts and tackles of fishermen and for the uplift of fishermen in the Territory.

During the last year of the First Plan, a sum of Rs. 30,000 was spent on the organisational set-up and for the development of marine and inland fishery resources. In the II Plan, schemes costing Rs. 5.31 lakhs were implemented in order to bring the inland water areas under fish culture, to stock the water areas with fast-growing fish seeds, to demonstrate the advantages of mechanised fishing and to train fishermen in mechanised fishing, etc. The fishermen were also supplied with synthetic fish net twine at subsidised rates. As a result of these measures fish production in the Territory was estimated to have increased to 4,500 metric tonnes at the end of the II Five Year Plan. A departmental Fish Curing Yard was opened at Mahe and pure salt supplied at subsidised cost to encourage the practice of curing fish through hygienic methods under the supervision of departmental officials. For the first time, motor vans were introduced in Pondicherry for quick transport of fresh fish from landing centres to marketing places.

During the Third Plan, the scope of the above schemes was widened by increasing the number of mechanised boats supplied to fishermen on loan-cum-subsidy basis, by setting up an Ice-Plant-cum-Cold storage Unit* in Pondicherry for the preservation of fish and by hiring out more vehicles for the transport of fish from landing centres to marketing places, etc. The Indian Fisheries Act, 1897 was extended to this Territory on 1 October 1963 under the Pondicherry (Extension of Laws) Regulation, 1963. The above Act's application was subsequently amended, and the Indian Fisheries (Pondicherry Amendment) Act, 1965 (Act 18 of 1965) was passed by the Legislature and received the assent of the President on 5 November 1965. The schemes implemented under the III Plan involved an expenditure of Rs. 15.24 lakhs as a result of which annual fish production was estimated to have risen to 9,000 metric tonnes by 1965-66.

Between 1966 and 1969 which marked the period of annual plans, schemes initiated during the previous plans were continued and projects half way through were completed at a total cost of Rs. 19.29 lakhs. Fish production is estimated to have increased to 12,500 tonnes by March 1969.

The Fourth Plan schemes which envisaged a total outlay of Rs. 85 lakhs, aimed at increasing fish production from 12,500 tonnes to 15,000 tonnes during 1973-74. The inland water areas were developed by stocking fast growing quality fish seeds like catla, labeo, cirrhina mrigala, common carp, etc. Fish seeds were also supplied to private pisciculturists at government rates and municipal tanks were stocked with fish seeds at half cost. To meet the increasing demand for fish seeds, two Fish Seed Farms were established, one each at Pondicherry and Yanam. The Karaikal Fish Farm (by the side of the Arasalar) was commissioned on 3 January 1973. Induced breeding experiments were carried out for the first time in Pondicherry and Karaikal to produce pure quality fish seeds. The strength of the fleet of fish vans was increased to seven, with five operating in Pondicherry and two in Karaikal. These vans were hired out to Fishermen Co-operative Societies to transport the fish from landing centres. The Karaikal Ice-Plant-cum-Cold Storage Unit† was commissioned in March 1971. In order to provide credit facilities at nominal interest

* The Ice-cum-Cold Storage Plant at Pondicherry was commissioned on 27 November 1967. The capacity of the Ice-Plant is 2 tonnes and that of the Cold storage plant, 5 tonnes.

† The capacity of the ice plant is 1 tonne and that of the Cold Storage Unit 2 tonnes.

and to rationalise the distribution of essential fishery requisites in the Union Territory, Primary Co-operative Societies were organised in the Territory. As on 31 March 1974, there were 37 Primary Fishermen Co-operative Societies and two Apex Societies. * Six of the Primary Societies confined their activities among inland fishermen. In all, 124 fishermen and 39 fisheries personnel were trained. Two Service-cum-Maintenance Units were established, one at Pondicherry (near the port) and the other at Karaikal (near Arasalar) to repair and maintain mechanised boats. Under the scheme 'Improvements to minor fishing harbours' a landing jetty and a fish auctioning shed were constructed at Karaikal. Under the same scheme, the construction of a landing jetty and deepening of the river mouth were taken up in Mahe. In Karaikal the construction of a slip-way together with the deepening of the river basin was taken up.

The proposal to set up an Inshore Fishing Survey Station was approved by the Planning Commission in 1972. Survey of inshore waters was to be taken up to assess the fishery wealth of inshore waters, using various fishing tackles. By the end of the IV Plan fish production in the Territory was estimated to have increased to 17,960 tonnes as against the target of 15,500 tonnes. The actual expenditure under IV Plan amounted to Rs. 92.94 lakhs.

Inland Fisheries :

Pondicherry: The inland fishermen in this region mostly depend upon fishing in ponds, tanks, lakes and in the estuarine waters of Ariyankuppam river, Chunnambu Ar, etc. Since most of the tanks and lakes are seasonal, some of the fisherman are engaged part-time in fishing and part-time in agriculture. As per the data collected by the Fisheries Department in 1971, there were in all 2,282 inland fishermen living mostly in the following villages in the region :

- | | | |
|--------------------------|------------------|------------------|
| 1. Murungappakkam. | 4. Purnankuppam. | 6. Nettappakkam. |
| 2. Ariyankuppam. | 5. Nonanguppam. | 7. Villiyanur. |
| 3. Chinna Virampattinam. | | |

* The Pondicherry State Fishermen's Co-operative Federation Ltd., and the Karaikal Fishermen's Co-operative Marketing Union Ltd.

Of these 302 are actively engaged in fishing with cast nets and drag nets made of cotton and nylon with mesh size, ranging from 1.27 cm. to 5.08 cm. In Chinna Virampattinam and Nonanguppam, fishermen use small catamarans sets for fishing in the rivers. Saar fishing using bamboo saars for fishing. weed fishes in the lakes is also common in this region. The average income of inland fishermen per day ranges from Rs. 3 to Rs. 4. There are five Fishermen Co-operative Societies at Murungappakkam, Ariyankuppam, Chinna Virampattinam, Purnankuppam and Nettappakkam which supply the fishery requisites and also provide credit facilities to them.

Karaikal : Though the condition of the inland fishermen of Karaikal does not differ much from those in Pondicherry region, only a smaller number are engaged in pisciculture in perennial tanks and ponds and the rest are engaged part-time fishing in rivers and part-time in agriculture. The 1,358 inland fishermen in Karaikal region live in villages scattered in all the six communes. They use tackles like cast nets and drag nets made of cotton and nylon with mesh sizes ranging from 1.27 cm. to 5.08 cm. In all, only 390 are active and full-time fishermen. Although in 1957, a Fishermen Co-operative Society was formed exclusively for inland fishermen, at present all the Marine Fishermen Co-operative Societies look after the interests of the inland fishermen also.

Yanam : There are six inland fishing hamlets situated on the banks of the Coringa viz.

- | | | |
|----------------|------------------|--------------------|
| 1. Mettakurru. | 2. Kothapeta. | 3. Sangadirevpeta. |
| 4. Agraharam. | 5. Kanakalapeta. | 6. Kurasampeta. |

In 1971 the total inland fishermen population of these villages was 2,058 of whom 559 were active fishermen engaged in fishing throughout the year with indigenous fishing crafts like *nava* and *shoe dhonies* and fishing tackles made mostly of cotton yarn and nylon. They use mostly cast nets, drift nets, drag nets and Rangoon nets with mesh sizes ranging from 5.08 cm. to 15.24 cm. The average income of the fishermen comes to about Rs. 5 to Rs. 10 per day during good fishing season and Rs. 3 to Rs. 5 during rough weather. The Agraharam Inland Fishermen Co-operative Society is the only institution which caters to the needs of all the inland fishermen in Yanam. Inland fishing is very negligible in Mahe.

Pond Culture : The total extent of fresh water in the Territory is estimated at 1,347 ha. The total area under fish culture by Government agencies is 838 ha. of which the Usteri and Bahur lake alone account for 830 ha. and the remaining area comprises ponds stocked under the Rural Fishery Demonstration Scheme. About 170 ha. are said to be under fish culture by private agencies.⁵⁵ The remaining area is distributed among 612 tanks. Most of the tanks and ponds are only seasonal depending mainly on rain water and are used for irrigation purposes. In small ponds the water is turbid and muddy, being used for washing cattle. Except for the two major water bodies and some of the other perennial ponds not used for irrigation, the others are unfit for fish culture. In Karaikal the tanks are regularly fed by the rivers and canals, some of which are seasonal and others perennial.

Only a few fishermen are engaged in pond culture, the rest attending to riverine and estuarine fishing. The average annual production is estimated at about 140 tonnes.

The fishery rights of Bahur and Usteri lakes, the two biggest in Pondicherry region, were originally vested with the Revenue Department. These lakes were transferred to the Directorate of Fisheries in 1956. The lakes are stocked annually with quality fast growing fish seeds and the fishery of these lakes is auctioned every year.

Details of annual income from Bahur and Usteri lakes for the years 1969-75 are given below :

Year			Bahur	Usteri
			Rs.	Rs.
1969-70	..	..	19,907	9,060
1970-71	..	..	17,890	13,701
1971-72	..	..	18,999	9,875
1972-73	..	..	30,002	11,000
1973-74	..	..	7,251	9,901
1974-75	..	..	840	Nil *

* There was no water in the lake due to failure of monsoon.

The Usteri is heavily weed infested. In summer, weed patches dry up causing progressive elevation of the tank bed thereby hampering fish culture in the lake.

The early experiments in culture fisheries was not very encouraging in the Territory. Explaining the situation in 1965, the Indian Council for Applied Economic Research pointed out that, "Seven rural fishery demonstration units of a total area of 2.94 ha. were in operation during 1961-62 and 10 units of a total area of 4.06 ha. during 1962-63. During 1961-62 these were stocked with 32,538 fingerlings at a cost of Rs. 2,743 and the revenue from sale of fish was Rs. 936. Corresponding figures for 1962-63, when 1,000 fingerlings cost Rs. 111, are 53,951 fingerlings at a cost of Rs. 3,562 and revenue, Rs. 1,754. In addition a compensation of Rs. 515 was paid to the pond owners. In all instances the cost of seed has far exceeded the value of fish sold and this clearly demonstrates that the present venture is neither economical nor fruitful." 56 The Council, therefore, suggested that import of fish seed from outside the Territory be discontinued immediately and attention concentrated on local collection. The Council further suggested the setting up of a 3 ha fish farm estimated to yield about 5 tonnes of fish per annum. The Councils' Report also called for improvement of the Ariyankuppam stocking ponds.

Most of the tanks are owned either by the P.W.D. or the Agriculture Syndicates or by municipalities of the respective communes or private pisciculturists. The tanks owned by the Agriculture Syndicates, the Municipalities and the P.W.D. are at present not regularly stocked with quality fish seeds and only the natural wild fishery accidentally available in the tanks by the influx or river waters are auctioned by the respective municipalities and Agriculture Syndicates.

It is also difficult to develop the inland fisheries in the Territory on a permanent basis unless tanks are sufficiently deepened to retain more water for longer periods. Almost all the lakes and tanks in Pondicherry region are seasonal, depending mainly on rains and rainfed supply channels. Since most of the inland fishermen are part-time fishermen except a few residing in Nettappakkam, Chinna Virampattinam and Murungappakkam village of Pondicherry region, and in Karaikal and Yanam, the inland fisheries particularly culture of fish in all the inland tanks, could be developed to a considerable extent only with Government initiative.

In 1959-60 the inland water areas in the Territory were surveyed with the help of the technical staff to assess the fishery potential. It was found that about 182 tanks and lakes in Pondicherry, 500 tanks in Karaikal and 15 tanks in Yanam were under regular pisciculture. Some of these tanks were selected as Rural Fishery Demonstration Tanks and the utility of profitable fish culture was demonstrated to the public upto 1966.

With the help of Block Agencies in Pondicherry and Karaikal, some of the tanks were deepened and tank bunds strengthened. Technical guidance was provided and quality fish seeds were supplied to interested private pisciculturists by the extension staff and the staff of the Directorate of Fisheries. Practical training in fish culture was also arranged. This programme continued till 1969.

Steps were also taken in the year 1960 by the Directorate of Fisheries to get the fishery rights of some of the inland waters from the Agriculture Syndicates and the P.W.D. transferred to the Directorate of Fisheries so that scientific culture of fish could be done to increase fish production.

The Rural Fishery Demonstration Scheme came in for a radical re-organisation in 1970 with a view to increasing inland fish production in the Territory. A survey of all culturable inland waters was conducted to facilitate the selection of productive tanks under the control of the municipalities and to stock them with quality fish seeds. In all, 82 municipal tanks were selected for conversion into fish farms.

Following the survey, 39 municipal tanks in Pondicherry, Karaikal and Yanam regions were stocked with quality fish seeds at half cost in an attempt to raise inland fish production and the revenue of the respective municipalities.

In all, 14 tanks in Pondicherry region and 13 tanks in Karaikal region were selected under the Applied Nutrition Programme and stocked with fish seeds and reared scientifically. The fish harvests from these tanks were distributed to Mathar Sangams and balwadis to feed children and nursing mothers in Ariyankuppam, Villianur and Ozhukarai Communes in Pondicherry and Mandapattur village of Kottuchcheri Commune in Karaikal region.

In order to have up-to-date data of all inland waters in the Territory yet another survey was carried out in 1975.

Riverine/Estuarine fisheries:

Only the estuarine part of rivers in the Territory is deep and perennial. The mouths of most rivers remain closed by sand bars during summer but a few are permanently open and are subject to tidal influence throughout the year. In all rivers, the estuarine portion is brackish. River fishing is confined almost exclusively to estuarine regions. About 600 fishermen are engaged in this method of fishing. The estimated annual production (in 1965) from riverine fisheries was only about 60 tonnes. At present the average catch per day is estimated to be about one tonne.

Pondicherry : The riverine fisheries of Pondicherry region are not well developed when compared to those of Karaikal and Yanam regions, because the rivers here are only seasonal and get dried up except during the rainy season and floods. Hence there is only limited scope for further development of riverine fisheries in the tail-end of the rivers viz. Ariyankuppam river (8 km.) Chunnambu Ar (6.5 km.), Malattar (28 km.), Gingee river (24 km.) and Pambai Ar (11 km.) in Pondicherry region. However the estuarine portion of Ariyankuppam Ar and Chunnambu Ar is rich in fishery during the rainy season and floods and whenever the bar at the mouth of the river remains open. The estuaries afford rich fishing grounds for the inland fishermen in the surrounding villages of Murungappakkam, Ariyankuppam, Nonanguppam, Tengathittu, Chinna Virampattinam and Purnankuppam. The fishery is freely enjoyed by them without any licensing system. The inland fishermen mostly utilise cast nets and drag nets with 1.27 cm. to 2.54 cm. mesh size made of cotton and nylon with small catamaran logs of 1.22m. to 1.83 m. in length. Rhinomugil corsula, Mugil tade, Mugil parsia, Lates calcarifer, Etroplus suratensis, Mystus gulio, Arius spp., Palaemon, Chanos chanos, etc. are the important species available.

Karaikal : The rivers of Karaikal are rich in fishery generally throughout the year and especially during floods, as most of the river bars remain open throughout the year except for one or two months. The inland fishermen of Karaikal, T.R. Pattinam, Kil Vanjiyur and Mel Vanjiyur enjoy the fishery rights of the estuarine portion of Arasalar, Tirumalarajanar and Pravadayanar. But

the upper reaches of the aforesaid rivers and Nandalar, Nattar and Nular are usually leased out yearly or once in two or three years by the respective municipalities. The lengths of the rivers flowing in Karaikal region are as follows :

1. Nandalar	: 11.0 km.	4. Tirumalarajanar	: 28.0 km.
2. Arasalar	: 24.0 km.	5. Pravadayananar	: 8.0 km.
3. Nular	: 16.0 km.		

As all the rivers flowing in Karaikal region are distributaries of River Kaveri, the fishes common in Kaveri are found in the rivers of Karaikal. The common species met with in the upper reaches are *Catla catla*, *Labeo* spp., *Cirrhina* spp, *Wallago attu*, and *Mystus* spp. In the lower estuarine portion *Lates calcarifer*, *Eetroplus suratensis*, *Chanos-chanos*, *Mugil cephalus*, and *Mugil tade* are met with. The average catch per day is two tonnes.

Mahe : The Mahe river runs for a distance of about 2 km. in Mahe region before it joins the Arabian Sea. The fishery of this portion of the river comprises mostly estuarine varieties and forms only a small portion of the total fish production of that region. There is said to be little scope for developing the estuarine fisheries in Mahe.

Yanam : The Coringa which is a branch of Godavari river, flows skirting Yanam region for about 24 km. and is 15 to 20 fathoms deep. The main catches comprise *Hilsa ilisha*, *Mugil cephalus*, *Labeo fimbriatus*, besides major carps like *Catla catla*, *Labeo rohita*, *Cirrhina mrigala*, *Hilsa* spp., etc., in the lower reaches during sea tidal influence in summer. During flood season (between July and November) the major fishery consists of major and minor carps, cat fishes like *Mystus aor*, *M. sengkala*, *Pangasius*, *Clupisoma*, *garuva*, *Ompok bimaculatus* are also available in plenty. Prawn fishery in Godavari forms an important feature. The species met with are *Macrobrachium rosenbergil* and *M. malcolmsoni*. The total fish production in the region is nearly two tonnes per day.

The National Council for Applied Economic Research which conducted a survey of the Territory in 1965 suggested the construction of Estuarine Fish Farms in the Territory. It pointed out that the Ariyankuppam River, Chunnambu Ar, Malattar, Ponnaiyar in Pondicherry region and Arasalar

Tirumalarajanar and Pravadayananar in Karaikal region are in communion with the sea for about three to four months in a year. Hence the Council recommended that during this period, four to five stake nets could be operated in the mouth of these rivers for about 65 days in a year. The report further pointed out that the estuarine areas in the Territory, if properly utilised by systematic stocking and adoption of conservation methods, would yield about 150 tonnes of fish annually.⁵⁷

Diffused Fish Farm : In an attempt to increase the fishery wealth in Yanam region, a scheme for the establishment of a Diffused Farm in Coringa river at Malleswaram near Yanam was taken up as a joint venture of the Governments of Andhra Pradesh and Pondicherry in 1963. The Inspector of Fisheries, Yanam is placed in charge of the farm and functions under the supervision of the Assistant Director of Fisheries, Kakinada. This farm covers an area of 10-12 hectares where regular stocking of fish seeds like Catla, Labeo, Cirrhina, and Common carp is resorted to and the fishery wealth is auctioned.

Induced Fish Breeding Centres : In order to meet the increasing demand for quality fish seeds, two Induced Fish Breeding Centres were established, one at Pondicherry and the other at Karaikal. Breeding experiments are conducted regularly on Major carps and Common carps (*Cyprinus carpio*) since 1967 in these Breeding Centres.

Fresh Water Fish Seed Farm : One Fresh Water Fish Seed Farm covering an area 1.42 ares was established at Yanam under the 'Grow More Food Scheme' during the Second Plan period. Regular stocking for rearing, breeding and marketing of fishes like Catla catla are being carried on in the nine ponds attached to the farm.

Estuarine Fish Farms : As part of the efforts to demonstrate the utility of pisciculture and to meet the shortage of fish seeds in the Territory, an Estuarine Fish Farm was established in the year 1960 at Thengathittu village in an area of two hectares. The farm was constructed with 13 nurseries and two stocking ponds and stocked with *Chanos chanos*, *Mugil cephalus*, *Mugil tade*, *Rhinomugil corsula* and *Tilapia mossambica*. Experiments on the growth, habitat and feeding of *Chanos chanos*, *Rhinomugil corsula* were carried out in the farm by the field staff in addition to rearing and distribution of fish seeds.

The IV Plan included a proposal to set up one more Estuarine Fish Seed Farm at Karaikal near the Arasalar estuary. A site was acquired by the Directorate of Fisheries and the farm started operating from 1973.

Seed Collection Centres : In order to meet the demand for fast growing quality fish seeds, Seed Collection Centres were developed at the following places in the Territory:

<i>Pondicherry region</i>	<i>Karaikal region</i>	<i>Yanam region</i>
1. Thengathittu	1. Manampettai	1. Yanam
2. Murungappakkam	2. Akalanganni	2. Kanakalapeta
3. Chunnambu Ar	3. Andur	3. Mettakkurru
4. Kanganamkuppam	4. Vilidiyur	4. Farampeta

The Seed Collection Centre close to the Thengathittu estuary started operating in 1960 and estuarine fish seeds like *Mugil cephalus*, *Rhinomugil corsula*, *Mugil tade* and *Chanos chanos* were collected and stocked in the Estuarine Fish Farm at Thengathittu to be eventually let into lakes and ponds in Pondicherry region.

In Karaikal the Seasonal Seed Collection Centres which operate between July and December are located at Manampettai adjoining the Tirumalarajanar, at Pravadayan regulator in the Pravadayanar,, at Akalanganni in the Arasalar and at Mudikondan in the Pattinam canal. Fish seeds like *Catla catla*, *Labeo fimbriatus*, *Labeo calbasu*, *Cirrhina mrigala*, *Cirrhina cirrhosa*, etc. are collected and stocked in the ponds of Karaikal. Part of the requirements of Pondicherry region and private pisciculturists is also met from these centres. Yanam, by virtue of its position in the Godavari delta, possesses a regular Seed Collection Centre where quality fast growing fish seeds like *Catla catla*, *Labeo rohita*, *Labeo fimbriatus*, *Labeo calbasu* are collected regularly by the staff of the Directorate and by private pisciculturists to stock the Government waters and private tanks in Yanam. Distribution to private parties and to Pondicherry region is also resorted to.

Marine Fisheries :

All the four regions of the Territory are maritime by character, which afford great possibilities for marine food production in general. Nevertheless, fish output of any coastal region does not depend merely on the length of the coast-line alone but on geographical and oceanographical factors such as the nature of the coast, the characteristics of the continental shelf and the presence of fishing grounds in the vicinity. Since these features are not uniform in all the four regions, the production of fish in the regions show marked variations. This explains why Mahe which has a coast-line of only 300 metres accounts for nearly 60 per cent. of the total catch in the Territory.* This settlement is situated along the richest fishing belt between Ponnani and Mangalore on the West Coast. 58

Pondicherry region : There are 16 marine fishing villages along the coast with a population of 14,260 fisher folks. These villages serve as bases for about 2,631 catamarans and 79 country boats being operated by 3,897 active fishermen. The villages from north to south are—

1. Kanakachettikulam	}	Ozhukarai Commune
2. Periya Kalapet		
3. Chinna Kalapet		
4. Pillaichavadi (Kuppam)		
5. Solaittandavankuppam	}	Pondicherry Commune
6. Vayittikuppam		
7. Kuruchchikuppam		
8. Vambakirappalaiyam		
9. Dubrayapet		
10. Periya Virampattinam	}	Ariyankuppam Commune
11. Chinna Virampattinam		
12. Pudukkuppam		
13. Nallavadu		
14. Narambai	}	Bahur Commune
15. Murttikuppam		
16. Pannittittu		

* Since then, it appears, the situation has changed drastically. In 1973, Mahe accounted for a catch of 1,969 tonnes only representing 11 per cent. of the total marine fish production of 17,489 tonnes for the Union Territory.

The total fish landings of these villages during 1969-70 were estimated at 4,160 tonnes. The important varieties of fish landed in the region and the seasons during which they are caught in abundance are detailed below :

<i>Month</i>	<i>Varieties of fish available</i>
1. January	Ribbon fish, horse mackerel, lactarius, seer, jew fish, prawns.
2. February	Mullets, ribbon fish, sabre fish, horse mackerel, white bait.
3. March	White bait, sardines, ribbon fish, horse mackerel, jew fish.
4. April	Sardines, white bait, lactarius, pomfret, jew fish.
5. May	Sardines, white bait, pomfret, jew fish, flying fish.
6. June	Flying fish, pomfret, mackerel, mullets, lactarius, prawns.
7. July	Sardines, ribbon fish, mackerel, mullets, lactarius, prawns.
8. August	Jew fish, mullets, horse mackerel, shark, sabre fish, flying fish.
9. September	Shark, jew fish, sardines, anchoives, silver bellies, prawns.
10. October	Ribbon fish, jew fish, mullets, prawns, white bait, lactarius.
11. November	Sabre fish, mullets, prawns, jew fish, lactarius.
12. December	Silver bellies, cat fish, mullets, lactarius, prawns.

The varieties which appear in a fairly large number are ribbon fish, sardine and silver belly. Sharks, perches and sciaenids (jew fish) are also fairly abundant. Sharks are reported to be abundant at 40 to 60 fathoms. Since such grounds are situated 20 to 25 km. off-shore, fishermen visit these grounds only when the sea is calm and winds are favourable. The flying fish fishery which lasts from May to July is probably the most important seasonal fishery of the region yielding about 350 tonnes annually. The catch per fisherman comes to about 900 kg. per month. The eastern coast is poor in shoaling varieties like oil sardines. The fish landed here is mostly consumed locally.

The fishing crafts and tackles used here are mostly of the indigenous type designed to suit local conditions. Modern mechanised boats and nylon fishing gears are only of recent origin. The sea being rough on the east coast, the surf breaks heavily upon the coast throughout the year. Hence non-rigid crafts such as catamarans and masula boats are preferred by fishermen.

The fishing nets and other implements are so designed for particular varieties of fishes viz. long lines, and large meshed drift nets for fishing sharks, rays, etc. The shore seines are used for shoaling mackerels, sardines, etc.

The catamaran is the most common fishing craft used in the region. It is a keelless raft formed by lashing together 3 to 7 or 8 logs cut into a square shape on one edge and curved into a rough cone at the other. The conical end rises slightly above the general level of the raft and forms the stern of the catamaran. Lunemedulla (imported from Sri Lanka) and Albezzia (Vakaimaram) logs are used for making these catamarans. They are purchased either from private merchants or through Fisheries Co-operative Societies. Some years ago these logs used to be imported from Sri Lanka. Nowadays they are obtained from Kerala. The cost of a set of logs ranges from Rs. 500 to Rs. 2,000. Apart from these catamarans, there are sub-types of which special mention may be made of '*kolamaram*' or '*Flying fish catamaran*' used for fishing operations at 32.20 km. to 40.25 km. from the shore for catching flying fish from May to July. The *kolamaram* is made of seven logs with an accessory one lashed upon the star board. It costs about Rs. 2,500 to build such a catamaran nowadays.

Masula boats are used for fishing with the aid of shore seine nets. This is a non-rigid boat constructed with '*aiyini*' (*Artocarpus hirsuta*) planks, without ribs or frames so as to withstand the severe knockings of the surf. The planks are sewn together with coir rope and the spaces between the planks are filled with dry straw. The cost of a masula boat ranges from Rs. 1,500 to Rs. 2,500.

Though the indigenous fishing implements are of various types, they can be conveniently classified under the following four broad groups :

1. Bag nets and boat seines.
2. Shore seines.
3. Drift nets and gill nets.
4. Long lines and hand lines.

The nets are mostly made of cotton and hemp. Long lines used for sea fishing are made of cotton. The nets are prepared by hand and are commonly preserved by treating them with bark decoction or by starching. Some important types of nets under each group are briefly described below :

Thurivalai (Vellavalai) is a primitive type of trawl net operated from two catamarans in waters 4-6 fathoms deep. Demersal varieties like cat fish, rays and soles are caught with the help of these nets. The mesh of the net is usually 1.27 cm. near the cod and 6.35 cm. in the wings.

Edavalai is a shallow bag net with a wide rectangular mouth having a mesh size of 6.35 cm. near the mouth. It is used in conjunction with lures called *kambi* consisting of strings of coconut leaves attached to a rope and moored in the sea at the commencement of the fishing season for catching pelagic fishes like pomfrets, sardines and mackerels. The net is operated in 6-8 fathoms of water.

Among shore seines *periavalai* contains a bag like cod end with two wings or halves of about 18.30 m. length and 10.27 m.-13.72 m. breadth with long wings of about 493.50 m. in length. The net is short near the surf beaten shores and is hauled from a *padagu* (masula boat) in about 1-2 fathoms of water and by rowing round in a circle, a shoal is trapped. The net is then dragged towards the shore. Sholing fishes like sardines, mackerels, anchoives, cat fish, caranx and prawns are hauled up with the aid of these nets.

Drift nets and gill nets are wall like nets made of hemp or cotton. Nowadays it is made of synthetic twine of various sizes and meshes. The material, mesh and size of nets differ according to the type of fish caught. Generally wooden floats (now slowly being replaced by synthetic floats) and some sinkers are attached to the head and foot ropes of the net respectively. Drift nets are generally intended to catch big varieties of fish and are therefore made of strong material with large meshes. The operation consists in paving out the net in the fishing ground with one end of the net secured to the boat. Then the boat and the net are allowed to drift in the current and the tide. The fish, while moving about, are gilled or entangled in the net. After a few hours, the net is hauled up and the fish collected. Gill nets are generally made of cotton, (now increasingly being replaced by synthetic twines like nylon, terylene, amilon, etc.) with comparatively smaller meshes.

The net is paved out in the course of shoaling fish which are eventually gilled. The cost of making a net ranges from Rs. 500 to Rs. 2,000 per piece, depending upon the size, material used for webbing, etc. These nets are locally known as 1. *Valavalai*, 2. *Thadachivalai*, 3. *Kavalavalai* and 4. *Pachavalai* or *Irrugavalai*.

The long line consists of a special form of set line made of twisted cotton yarn. They are sufficiently longer in length and provided at regular intervals with thinner branch lines called snoods to which several hooks are attached. The long line is made to suspend horizontally in mid water or at required depth by attaching the long line to vertical supporting ropes with anchored buoys. The line is periodically hauled up for fish.

Hand lines are mostly made of nylon monofilament. They are operated by individual fishermen in inshore waters from anchored catamarans. It consists of a simple vertical line to which lead or iron weight is attached for casting the line far away into the sea. To each line are attached two or more hooks by means of snoods. Each fisherman will operate two to three hand lines at a time. Small sharks, perches and other miscellaneous types of fish are caught.

Karaikal region: Karaikal town is situated on the northern bank of Arasalar which has a fairly wide and deep estuary. Though the channel is shallow, the mouth of the river is almost permanently connected with the sea. In summer, boats can pass in and out during high tide.⁵⁹ The town holds out good prospects for development as a base for mechanised fishing boats.

There are ten fishing villages in Karaikal region spread over a length of 24 km. from north to south, viz.

1. Mandabathur	..	Kottuchcheri Commune
2. Kalikuppam	..	..
3. Akkampettai	..	..
4. Kottuchcheri (Macuary)	..	..
5. Kil Kasakkudi	..	..
6. Kilinjimedu	..	Karaikal Commune
7. Karaikalmedu	..	..
8. Karakalachcheri	..	Niravi Commune
9. T.R. Pattinam	..	T. R. Pattinam Commune
10. Kil Vanjiyur	..	..

Out of a total population of 5,503 fishermen, only 1,439 are active fishermen engaged in fishing. Landings consist mostly of anchoives, exocoetus, mackerel, sharks and rays.

Catamarans are the chief fishing crafts numbering 705 in all. A small number of masula boats are also in operation. The tackles are more or less of the same kind as used in Pondicherry region like (1) boat seines and bags nets (*vella valai*, *eda valai*) *mulla valai* (2) shore seines *periya valai* and *kooni valai* (3) wall nets and drift nets *pachu valai*, *kanni valai*, *thadachi valai* and *vala valai*). All are made of cotton or hemp while nylon fish net twine is fast replacing cotton with snivers made of cement balls or small stones and floats of wood or synthetic floats wherever found necessary. The composition of catches is similar to that of Pondicherry except that anchoives, mackerel and horse mackerel are more conspicuous.

Analysing the fishing prospects of Karaikal in the year 1965, the Council for Applied Economic Research stated: "The sea fisheries of the Thanjavur District, in the coastal periphery of which Karaikal is situated, are the richest in Tamil Nadu State yielding about 35,000 tonnes or more than double the catch of any other district in the State. Under normal conditions, the same situation should be expected in Karaikal also. On this assumption the production of Karaikal should be about 2,000 tonnes. It is obvious Karaikal is not at present taking advantage of the opportunities for fishing offered by the geographical position." 60

Mahe region : Mahe which has a coast-line of only 300 metres lies between the richest fishing belt between Ponnani and Mangalore on the West Coast. It brings a rich harvest of pelagic fishery.

There are in all 3,817 fishermen of whom 695 are active. Most of the fishermen are Hindus, while Muslims and Christians constitute a small percentage.

The bulk of the annual catch consists of oil sardines which make up 55 per cent. of the total. Prawns constitute 16.5 per cent. and the other varieties taken together represent 28.5 per cent. Mackerel which is abundant

in the region and caught in fairly large quantities in some of the neighbouring fishing centres of Kerala, accounts for only five per cent. in Mahe probably due to the fact that the very narrow coast-line and the rocky nature of the intertidal region restrict the use of shore seine nets. ⁶¹

Fishing is largely done with country boats known as *odams* and *thonies* numbering about 130 in all (1971). These fishing crafts are not found suitable for prawn fishing, for which one has to reach deeper waters. ⁶² *Odam* is a large sized dug-out, measuring about 9.76 m. in length, 0.915 m. breadth and 0.76 m. depth. It is made by scooping out material from a large trunk. The keel portion is left thicker than the sides. It is mainly used for operating boat seine and gill nets.

The *thoni* is a comparatively smaller dug-out measuring about 7.32 m. in length, 0.915 m. breadth and 0.45 m. depth. It is chiefly used for operating drift and gill nets.

The tackles are mostly inshore seines, bag nets, besides long and hand lines. Nylon fish net twine is nowadays used extensively. The local names of fishing tackles are *ayila kolli*, *valia kolli*, *mathi kolli*, *ara kolli*, *nerya vala*, *mullan kolli*, *nethal vala*, *sultan vala*, *ayila chala vala*, *mathi chala vala*, *veechu vala*, *etta vala*, *thalayan vala*, *therendi vala*, *olugu vala*, *suravu vala* and *vepu*.

The fishing season lasts from September to March and the catches consist mostly of mackerel, sardines, silver bellies, soles, ribbon fish, skates, rays, sharks and cat fish. Raw fish is sold to hawkers and fish merchants. Surplus quantities are salt-cured and preserved. One fish curing yard is maintained by the Directorate wherein salt is issued at subsidised rates for scientific curing of fish by the fish curers under the supervision of the staff. Fish, either raw or iced, is also transported to the distant markets of Kozhikode, Cannanore, etc. by lorries and to Madras, Bangalore, Coimbatore and Tiruchchirapalli by rail.

Mahe is at the centre of a continuous prawn ground which stretches from Quilon to Mangalore. Intensive exploitation of this ground is now conducted from a few isolated centres. In 1965, the Council for Applied Economic Research pointed out that there was great scope for developing a centre at Mahe as there is no such centre anywhere within 30 km. to the

north or south. The Council further suggested that 25 mechanised boats with shrimp trawling equipment can be based at Mahe, together with the following installations :

1. a factory for processing prawns
2. a freezing plant.
3. an ice-plant.
4. a landing jetty.
5. a workshop and transport facilities.

The river, which widens into a small estuary, was found deep and wide enough for berthing 25 mechanised boats. Numerous rocks and boulders lie scattered across the mouth of the estuary leaving a narrow channel which can be negotiated only during high tide. It was suggested that the mouth of the river will have to be cleared by blasting some rocks so as to create a five-metre wide channel for the safe passage of boats to and from the sea. The absence of shore facilities for the preservation and transport of catches in fresh condition deter the development of the fisheries of Mahe. The Mahe catches are purchased by Tellicherry merchants and taken to Kozhikode and Cochin for further processing. For all these reasons there is said to be great scope for developing the prawn fisheries of Mahe. 63

Yanam region: In Yanam region, Gerempeta is the only fishing village which concentrates in marine fishing from January to June and in inland fishing from July to December. In 1971, the number of fishermen population was 736, all of them Hindus. Godavari estuary is 14 km. east of Yanam and Gerempeta is accessible to boats.

The shoe dhoni (canoes) is the commonest fishing craft in Yanam region. Made of teak wood, it is about 6.10 m. to 7.32 m. in length. It is so called because of its peculiar shape which resembles that of a shoe. It is used for operating gill nets and bag nets in the estuarine area of Godavari and in the bay nearby. *Navas* are boats measuring about 6.10 m. to 7.32 m. in length. They are built of teak wood planks with strong ribs and are fitted with a mast and a sail to serve as wind propellent. It is used in Godavari for operating gill nets. *Padavu* is another kind of boat in use here. Measuring about 9.15 m. to 9.75 m. in length, it is built in teak wood and is used for operating nylon gill nets in the sea.

Bag nets, gill nets, drift nets and cast nets are mostly used for fishing purposes. These nets are locally known as *jerugu vala*, *gavini vala*, *taarusu vala*, *isuru vala*, *pulasha vala* (Rangoon), *iraga vala* and *sila vala* (Dobbid). The bag net is specially designed for catching prawns. These nets are said to be very effective and a single net is claimed to harvest 225 kg. of prawns within an hour during the peak prawn fishing season lasting from May to July.

The catches consist mostly of Hilsa ilisha, sciaenids, soles, mullets, etc. Raw fish is transported via Kakinada Railway station to the interior towns of Andhra Pradesh, besides being sent to Calcutta and Madras. The rest of the catch is cured and sold in Andhra Pradesh.

The Administration has introduced several schemes with a view to improving the craft and tackles used by fishermen. Synthetic twines are distributed to fishermen at subsidised rates through Fishermen Co-operative Societies and Community Development Blocks. Short, medium and longterm loans are advanced at low rates of interest through Fishermen Co-operative Societies and the Federation to procure new crafts and tackles at 25 per cent. subsidy. Departmental vans are hired out to Fishermen Co-operative Societies to transport the fish catches from landing centres to marketing centres. As on 31 March 1974 there were seven fish vans, five operating in Pondicherry and two in Karaikal region. A Service-cum-Maintenance Unit, a Fish Landing Jetty and an Ice Plant-cum-Cold Storage Plant and Fish Auction Shed have all been established in Karaikal. The Service-cum-Maintenance Units at Pondicherry and Karaikal attend to the maintenance of mechanised boats operating in these two regions. Each unit is maintained by a Marine Foreman.

Marketing : In Pondicherry, the best part of the catch is consumed locally. Mahe and Yanam export bulk of their catches to neighbouring markets. The landed fish is auctioned with or without the help of fish auctioners who usually take a commission for their services. Fresh fish is moved to the interior villages by cyclists and to the big markets by fish vans. It is carried to the nearby places by women in head loads.

Catches are sold soon after landing to merchants who come from Pondicherry town, Cuddalore, Nellikkuppam, Panrutti, Villupuram and Tindivanam. While small sized fish are sold in basket loads, big sized fish

are sold in number. A good part of the fish landed in far way villages like Kalapet, Nallavadu, etc. are brought to the town through Departmental vans. No weights and measures are made use of anywhere. Only prawn is weighed before selling, although this is not the case always.

The marketing of fish is held under the sway of middlemen whose unhealthy influence is responsible for the low return to the producers and higher prices for the consumers. Although co-operatives could help in the matter, it is found that the activities of the existing Fishermen Co-operative Societies are confined only to the provision of credit facilities and fishery requisites. In 1972, a Fishermen Co-operative Marketing Union with co-operative societies, boat hirers and individual fishermen as members was formed in Karaikal to attend to the marketing problems, besides ensuring the supply of fishery requisites and spare parts for marine diesel engines. This Marketing Union also undertakes the transport of fish from landing sites to market centres.

All the better varieties landed here are moved fresh to the inland market. All the surplus landings are bought by merchants for curing purposes. Fresh prawns are procured by merchants who take them to the freezing stations in Tamil Nadu and Kerala for eventual export to foreign countries. Part of the prawn catch is also dried for export. In 1965, the establishment of a modern fish market with 20 stalls was recommended.⁶⁴ The cured fish has a good market in the nearby States of Tamil Nadu, Kerala and Andhra Pradesh. According to an estimate, about 1,500 tonnes of cured fish is exported to these States. Soles, cat fish, sharks, rays, mackerels and sardines are generally used for curing purposes. During the peak sardine fishing season, the surplus catch which can neither be sold nor diverted for curing purposes is converted into fish manure. While sciaenids, cat fish, sharks and perches enjoy a good market in Mayuram shandy, the exocoetus variety finds a good market in all the neighbouring States.

The following are the major fish markets in and around the various regions :

Pondicherry region : 1. Pondicherry. 2. Muttiyalupettai, 3. Ariyankuppam,
4. Nellittoppu, 5. Madukkarai, 6. Villianur.

Karaikal region : 1. Karaikal, 2. T.R. Pattinam, 3. Tittachcheri, 4. Niravi,
5. Tirunallar, 6. Mayuram, 7. Nedungadu, 8. Peralam.

Yanam region : 1. Kakinada and 2. Yanam.

Mahe region : 1. Mahe, 2. Cannanore, 3. Kozhikode, 4. Tellicherry.

A good proportion of the catches is sold fresh to the consuming public. The surplus landings are either kept in cold storage or diverted for curing purposes.

Fishermen used to cure fish in their own huts under very unhygienic conditions as a result of which the cured fish was always found to be dirty, ill dried, inadequately salted and foul smelling. In an attempt to encourage fishermen to adopt modern methods of fish curing, a fish curing yard was constructed in Mahe as early as 1961. In 1965 the Council for Applied Economic Research suggested that fish curing yards could be constructed in the remaining three regions of Pondicherry, Karaikal and Yanam. The Council further suggested that the fish curing yard at Mahe could be improved by providing running water supply and drainage together with processing and curing sheds. 65

As there are no fish curing yards in Pondicherry, Karaikal and Yanam, the fishermen still follow the traditional method of fish curing. Here it may be worthwhile to recall that the Fisheries Development Advisor had also made similar suggestions as early as 1956.

The price of fish is settled by count in the case of big fishes and by heaps or baskets in the case of smaller varieties during auction at the landing places. It is difficult to specify the price paid by the consumer for the different species as this varies from season to season and from day to day depending on the catches and market arrivals. However, an approximate indication of prices of some popular varieties of fish in 1971 is furnished below:

(Per kg.)

Rs. P.

1. Pomfret	..	..	3.50
2. Cybium	..	..	3.50
3. Caranx	..	..	2.25
4. Mullet	..	..	2.25

(Per Kg.)			
Rs. P.			
5. Sciaenids	..	..	2.00
6. Lactarius	..	..	2.00
7. Mackerel	..	..	1.75
8. Sharks	..	..	1.75
9. Skales & Rays	..	..	1.75
10. Cat-fish	..	..	1.50
11. Ribbon fish	..	..	1.50
12. Sardines	..	..	1.25

Mechanised fishing:

With a view to encouraging mechanised as well as deep sea fishing and improving the welfare of the fishermen community, mechanised boats were introduced in this Territory in the year 1958. To begin with, only smaller boats measuring 6.10 m. to 7.32 m. in length were introduced and they were used for fishing demonstrations. Later on, boats measuring 9.8 m. and 10 m. in length were put into operation. Having become popular, such boats have been distributed to fishermen/Fishermen Co-operative Societies on hire-purchase system at subsidised rates from 1960 onwards. Boats of larger size could not be put into operation due to the lack of suitable harbour facilities.

Mechanised boats were also distributed on hire-purchase basis on a subsidy of 12½ per cent. of the cost of the boats to Fishermen Co-operative Societies, trained fishermen, groups of fishermen and individual fishermen. Along with mechanised boats, modern fishing gears of synthetic fish net twine worth Rs. 8,000 are given at subsidised rates for making necessary nets. Accessories such as floats, cotton yarn, synthetic twine and ropes are also distributed to fishermen through the Pondicherry State Fishermen Co-operative Federation and Fishermen Co-operative Societies at subsidised rates in order to develop the marine fisheries in this Territory. Region-wise details of mechanised boats distributed to Fishermen Co-operative Societies, individual trained fishermen and groups of fishermen upto 31 March 1975 are given below :

Region				Individual fishermen	Groups of fishermen	Fishermen Co-operative Societies
Pondicherry	..	..	..	24	23	2
Karaikal	..	..	..	14	8	2
Mahe	..	..	..	2	7	1
Yanam	..	..	..	—	3	—

Training :

There are no training centres anywhere in the Territory. However, members of the fishermen community are selected and sent to centres located in the adjoining States for training in operating modern types of boats and gears. Till the end of 1973-74, 124 fishermen and 39 fisheries personnel were trained in improved methods of fishing in various Central and State Government institutions by the Directorate of Fisheries. Inland fishermen from Pondicherry and Karaikal were sent for training in basic fishing techniques and culture of fishes at the Fisheries Training Centre, Mettur (Tamil Nadu).

It is to be noted that the Council for Applied Economic Research had suggested as early as 1965 the starting of a Training Centre at Karaikal. 66

Organisation of Fishing Industry:

The fishermen normally operate in teams or individually, according to the implements used on share basis. A drift net team may consist of four or five fishermen, while the shore seine team would require from 20 to 40 fishermen. The catches are suitably divided among the fishermen according to the shares taken by them and the types of fish caught.

The fishermen in Pondicherry and Karaikal regions set apart a portion of their catches for the common fund of the village. This fund is utilised for the benefit of fishermen during the non-fishing season, festivals, distress, etc. In Mahe most of the fishing implements are provided by middlemen who receive by way of return a share of the catches. The catches have to be disposed of in the presence of these middlemen and the owners of the craft.

The first Fishermen Co-operative Society called the Karaikal Sea Fishermen Co-operative Society was formed on 17 November 1955. The very next year, four more Fishermen Co-operative Societies viz. 1. The Pondicherry Sea Fishermen Co-operative Society, 2. Murungapakkam Inland Fishermen Co-operative Society, 3. Mahe Fishermen Co-operative Society and 4. Yanam Fishermen Co-operative Society were formed. As on 31 March 1975 there were 38 Primary Fishermen Co-operative Societies, one Fishermen Co-operative Federation and one Fishermen Co-operative Marketing Union functioning in this Territory. Out of them, 32 societies serve marine fishermen and six cater to the needs of inland fishermen. All the societies are affiliated to the apex institution viz. the Pondicherry State Fishermen's Co-operative Federation Ltd., formed in 1967. The purchase and distribution of fishery requisites to its member societies is the responsibility of this Federation.

All matters relating to accounts, auditing and inspection of these societies were the responsibility of the Office of the Registrar of Co-operative Societies till 1967. In 1967, the Director of Fisheries was declared as Additional Registrar in the case of all Fishermen Co-operative Societies. Following this arrangement, a Co-operative Wing was established in the Directorate of Fisheries with one Cooperative Sub-Registrar and two Senior Inspectors of Co-operative Societies to deal with all matters connected with the Fishermen Co-operative Societies in the Territory.

In 1967, the St. Pierre Macquillon Committee of France gifted to the Government of Pondicherry two Doris boats. These boats were in turn given to the Federation which could not operate them profitably. They were subsequently disposed of.

The affairs of the Federation are managed by an elected nine-member board of directors. An Inspector of Fisheries functions as ex-officio Secretary of the Federation. Yet fishermen are still not well organised on an institutional basis to have a say in matters concerning their own welfare.

Relief measures:

Fishermen living in the coastal tracts of Pondicherry, Karaikal and to some extent in Yanam are open to the calamitous effects of cyclones which the eastern coast is prone to, resulting in great loss to life and property. Apart from relief arranged by private agencies, the Revenue Department also pays some compensation to those affected.

Housing : A housing scheme for the benefit of fishermen on the pattern followed in Tamil Nadu has been under implementation since 1970-71. Fishermen who own plots are given a grant of Rs. 750 and a long term loan of Rs. 250 each free of interest through the Fishermen Co-operative Societies. These amounts were subsequently raised to Rs. 1,500 and Rs. 500 respectively. The scheme is also implemented through the Block agencies in Villiyanur, Karaikal, Mahe and Yanam. During the IV Plan period, 292 fishermen families were benefited under the scheme.

Chank fisheries :

There are a few chank beds in Pondicherry and Karaikal regions which were leased out by the Revenue Department from time to time. In 1965 the Pondicherry chank fishery was leased out for a sum of Rs. 14,011 for a period of three years and that of Karaikal for Rs. 3,121. The same year the National Council for Applied Economic Research suggested the transfer of the chank fisheries to the Directorate of Fisheries for a more effective control of the chank beds.⁶⁷ It was also realised that an unrestricted collection of chanks would lead to its gradual depletion.

In June 1968 the control over chank fishery rights of Pondicherry and Karaikal waters was transferred to the Directorate of Fisheries. Subsequently the chank fishery of Pondicherry was leased out for Rs. 17,500 for a period of one year, eight months and 21 days. Even before the fishery rights were transferred to the Fisheries Department, the Karaikal chank fishery had already been auctioned by the Revenue Department for Rs. 2,500 for a period of three years upto 25 October 1969. The chank fishing rights of Karaikal region were subsequently leased out for Rs. 7,736 for a period of 10 months and 4 days from 26 October 1969 to 31 August 1970.

The rights of Pondicherry and Karaikal chank fisheries were again leased out for three years from 1 September 1970 to 31 August 1973 for Rs. 18,796 and Rs. 10,306 per annum respectively.

Mattee (Shell) Fishery :

The mattee shell fishery of Chunnambu Ar and Ariyankuppam waters is disposed of through auction by the Ariyankuppam Municipality. The Chunnambu Ar stretch was leased out for a period of three years at the

rate of Rs. 5,010 per annum and the Ariyankuppam stretch for Rs. 9,600 per annum. The lease amount of Ariyankuppam mattee fishing is divided between the Municipalities of Mudaliyarpettai and Ariyankuppam in the ratio of 3:2 as the river flows across both the communes.

The mattee shell fishery of Uppar was leased out by the Mudaliyarpettai Municipality for Rs. 1,250 from July 1970 to June 1971. The mattee shell of Chunnambu Ar was auctioned for Rs. 8,050 but was not accepted by the Government.

Some studies were conducted by the Directorate to increase the mattee shell income. Due to apparent loss of the bivalves in the rivers on account of pollution and drought, the shell fishery of Uppar and Chunnabu Ar could not be auctioned during 1971-72.

VI. Floods, Famines and Droughts.

Flood

A critical study of the origin of rains in the months of October—November along the Coromandel Coast has shown that they are caused by tropical disturbances and depressions which develop in the Bay of Bengal.⁶⁸ These atmospheric depressions are almost always followed by cyclonic storms of great velocity ripping across the sub-continental land mass. Naturally therefore, the coast must have been subjected to the ravages of cyclones from ages unknown.

While vital statistics of cyclones should be of interest only to meteorologists and climatologists, the dimension and frequency of cyclones should be of some interest to the general public and the administrators as well. Rains caused by cyclonic depressions bring about floods, which invariably cause considerable damage to the agricultural economy of the Territory. Especially in Karaikal the flood waters encroach upon agricultural lands and disrupt agricultural operations, besides causing considerable damage to crops. In Mahe, the Ponniam river is usually subjected to floods, its intensity varying according to the monsoon every year. In Yanam floods are caused almost every year by Godavari which runs through the region.

The earliest known cyclone which crossed the Pondicherry coast-line occurred in November 1681. On account of the floods caused by the rains, people had to move to up-country lands. There was another severe cyclone on the night of 17 August 1687 which caused considerable havoc.⁶⁹ A number of small vessels anchored along the shore were either damaged or lost.

Although for a continuous span of 54 years i.e., from 1691 to 1745 there are no reliable records about cyclones, we may be certain that the coast might not have been spared of cyclonic storms for such a long period.

The next cyclone about which a great deal of information is available occurred in November 1745. In fact Anandarangapillai has left us a detailed account of the devastation caused by the cyclone. Three storms of varying intensity crossed Pondicherry on the 3, 23 and 27 of November 1745 of which the first inflicted the greatest damage. The flood waters of Uppar swept away the huts on its embankments. The town itself was flooded. As many as forty persons died in the flooded regions of the town and over 2000 houses were damaged. On the night of 22 November 1745 the town was rocked by violent winds which, however, did not cause much harm. But the cyclone of 27 November was of considerable fury.⁷⁰

On 30 October 1752 a terrible cyclone, followed by incessant rains lasting several days, paralysed life all along the Cuddalore—Pondicherry coastal region. Vast stretches of land were submerged in water.

Comparatively Karaikal seems less exposed to the attacks of cyclonic storms. A cyclone struck Karaikal coast on 8 October 1754. Sea waves entered the town and reached up to the Bazaar area. Many houses collapsed and crops suffered extensive damage. Two vessels anchored off the shore ran aground.

The cyclone of 30 December 1760, harassed the British troops under Sir Eyre Coote and the British Fleet anchored off Pondicherry. The first cyclonic spell which crossed the town between 8 and 10 p.m. posed an imminent threat to the ships anchored along the coast. The second spell after mid night ripped through the town with even greater fury. Three vessels carrying 1,100 Europeans were drowned two miles south of Pondicherry leaving only seven survivors.⁷¹

Cyclonic storms of moderate force struck Pondicherry region in January 1761, July 1780, 26 November 1785 and 20 May 1787. Two cyclones of considerable intensity attacked the coast on 21 October 1763 and 5 October 1782. The effects of these cyclones were felt all along the coast from Cuddalore to Madras.

Again between 1795 and 1818, five cyclones (1795, 1800, 1807, 1811, 1818) have been reported. There were again cyclonic storms on 25 March 1820, 6 December 1827 and 2 December 1830.

De Melay, Governor of Pondicherry, in a report sent to France on 29 January 1831 has furnished an account of the havoc wrought by the severe cyclone of 2 December 1830. Crops in the surrounding villages were completely lost. The newly laid out Cours Chabrol suffered many breaches due to the onslaught of tidal waves. The Governor's report also listed the measures taken to provide relief to the affected people and specified how the cyclone had affected the settlement.⁷²

The cyclones of 30 November 1778, 7 May 1827 and 27 March 1853 left their scars on Karaikal.

The cyclone which struck Pondicherry on 24 October 1842 was the worst of all since 1745. Earlier, the region had experienced mild storms on 30 October 1836 and May 1840. The report sent by Camper on the cyclone of 1842 provides a detailed account of the cyclone and the havoc wrought by it. This cyclone blew in two spells, first at 4 p.m. and then at 6 p.m. the same day. The town suffered heavy damage. Roof tops were blown off. Uprooted coconut trees falling on houses had aggravated the damage. All the roads were filled with fallen trees and debris thrown up by the storm. Portions of the Central Jail were damaged. The hangars of Grand Bazar came down under its attack. The two weaving mills of Blin and Poulain suffered considerable damage. In the "**Place du Gouvernement**" hardly a tree or plant was left unaffected. Out of five ships that lay in anchor then in Pondicherry, three were wrecked. At least 82 men on board were reported lost. The total damage was estimated at over 5,00,000 francs. The Government of France sanctioned a sum of 13,000 francs for the immediate relief of those affected.

Cyclones in the month of March are very rare. But the one which struck Pondicherry and Karaikal in the year 1853 came early on 26 March. Four vessels anchored off Pondicherry port were lost. The tanks at Abhishekka-pakkam, Kilur and Mel Sattamangalam suffered serious breaches. In Karaikal the banks of Arasalar were breached at many points.⁷³

The cyclone of 20 November 1856 was so violent that the surging tidal waves broke the quay of **Cours Chabrol**. Two ships anchored off Pondicherry port went adrift in the tempest and ran aground at the mouth of river Ariyankuppam. The excessive rains of 1858 were responsible for inundating large tracts of land in Pondicherry and Cuddalore.

Loss of a large number of boats and vessels was reported in the cyclone of 19 October 1863. Karaikal too was not spared this time.

A cyclonic storm of great intensity struck the Coromandel Coast on 25 November 1865 not sparing Pondicherry from its impact. Telegraph posts were uprooted. The cyclone of 6 November 1871 accompanied by a storm and torrential rain simultaneously struck Pondicherry and Karaikal. While the damage in Pondicherry was moderate, Karaikal bore the brunt of its attack. The Administrator's Office and the Hospital in Karaikal were damaged. The Arasalar overflowed its banks and inundated the neighbouring residential areas. As many as 50 were counted dead in the floods.

In 1874, floods in the Ponnaiyar disrupted road communication between Pondicherry and Cuddalore for several days.⁷⁴

Pondicherry and Karaikal had again to face torrential rains which gave rise to floods on two occasions on 6 November 1884 and 16 to 19 December 1884. The cyclone of December 1884 proved to be the worst. The rains which came in a heavy down pour on 16 December did not stop for three days. Flood water, entered many houses in the town, and stored foodgrains were lost. But for the Govindasalai route and the circular boulevard, Pondicherry town would have been in great danger. The inhabitants of Thengathittu and the Leprosorium in Dubrayapet were evacuated to safety. Pondicherry town remained cut off from the adjoining areas. Vast stretches of roads were carried away by waters. Even the bridge over Chunnambu Ar on the Pondicherry—Cuddalore route gave way due to the extraordinary pressure of

water discharged from Usteri tank which was itself in imminent danger of rupture posing a threat to Villiyanur which would have been devastated. Even Pondicherry town, it was feared, would be submerged. For three days no assistance could be sent to Villiyanur where the people had taken refuge in the Sri Thirukameshwarar temple.

The pipe-lines bringing drinking water to the town had ruptured at Saram due to the collapse of a bridge, and the residents of the town were forced to drink well water. Repeated attempts were made by the Governor to proceed to Villiyanur. '*Kattumarams*' were rapidly constructed and were loaded in bullock carts. These carts could not, however, proceed beyond Nellittoppu as many culverts and bridges had been carried away by the surging flood waters. The Mayors of Villiyanur and Ozhukarai made splendid efforts in the face of unsurmountable difficulties to save life and property as much as possible. But still there were a few instances of loss of life, especially of those residents living on the banks of river Gingee. The loss of crops was colossal. The Governor sent an urgent message to Paris asking for immediate and massive aid for the flood ravaged colony. The bridges over Chunnambu Ar and Ariyankuppam river on the Pondicherry—Cuddalore road collapsed. Ferry service was, therefore, operated across these rivers until the bridges were repaired. In Karaikal also, the damages caused were heavy. Nedungadu and Grand' Aldee Communes were worst affected by the cyclone.

A commission was set up to study the losses suffered in the territories. A sum of 5,00,000 francs was granted by the Government of France towards relief. The Government of Indo-China contributed a sum of 5,000 piastres for the same purpose. While the total loss was estimated at 30,00,000 francs the amount of actual relief obtained amounted to 10,44,000 francs.

A cyclone of very great velocity struck Pondicherry on 22 November 1916. The effects of the cyclone were felt between 6 and 7 p.m. and by mid night it reached its maximum intensity. The local power house broke down even before the cyclone had hardly commenced. The darkness that enveloped the town only accentuated the severity of the situation. Almost the entire network of powerlines supplying electricity to the town was in a shambles. The Government Distillery building, the construction of which had just been completed, had its roof blown off.

The hospital buildings also were hit badly and left with their roofs blown off and walls cracked. The warehouses at the terminus of the railway lines in South Boulevard were inundated by flood waters. Although the old pier was not damaged, the watchman's cabin was uprooted. The buildings housing the water works were also affected, but the machinery were intact. Both Savana Mill (now Swadeshi Cotton Mills) and Rodier Mills (now Anglo-French Textiles) suffered damage. Roads throughout the region suffered extensive damage. The Pondicherry—Cuddalore road developed wide breaches at five points. The Usteri lake had accumulated water necessary for over 7½ months. A number of small tanks had broken their bunds. Post and telegraph communications between Madras and Pondicherry remained cut off for three days. The train services between Villupuam—Pondicherry stood suspended for five days. Trees in hundreds were uprooted. Plantain and betel fields were the worst affected. Large tracts of paddy fields were totally submerged by flood waters. A number of houses collapsed. More than 18,850 huts were destroyed. The number of casualty was 307. Of these, as many as 47 died in **Parc Colonial** (Botanical garden) alone.

The Government had to permit the public to lift all wood from the fallen trees on the roads and other public places to clear the roads of the debris quickly and inexpensively.

The victims of the cyclone, however, found immediate relief in the form of food, clothing and shelter through the philanthropy of local population*. But the aftermath of the cyclone was aggravated by a spell of heavy rains that hampered the execution of relief and repair works.

The victims were assisted with large contributions from the public. Governmental expenditure on establishment was reduced in order to divert the savings towards National Defence, and for the relief of cyclone victims.** From distant Mahe came a sum of Rs. 376 for the relief of victims. A sum of Rs. 9,000 was allotted in the budget towards repairing the damages caused by the cyclone. 75

* A report of the relief work done by V.V.S. Iyer is published in the November—December 1916 issue of *Kalaimagal*, Kalaimagal Kazhagam, pp. 270-271.

** It was the period of the First World War.

We have also records of cyclones which occurred in the years 1930, 1933, 1941 and 1943. The cyclone of 1943 was accompanied by torrential rain followed by floods. 76

There was another major cyclone in Pondicherry in 1952, which did not spare Karaikal as well. Because of sea erosion water entered Karaikal town and three persons died and many heads of cattle perished. The municipal administration provided relief to the victims. The biggest casualty of this cyclone was the old pier at Pondicherry. The bridge-head gave way and became totally unfit for operation. Although we hear of the flood disaster of 1958, no detailed information about the damage caused and the loss incurred is available. It appears, however, that some of the families cut off from the mainland were evacuated to safer areas.

Pondicherry region witnessed another cyclone of some intensity on 1 May 1966. The Government stepped into action and formed three-member-Committees for each commune, with the Mayors as Chairmen, to assess the damage and to report to the Government. It was also decided to give an outright grant not exceeding Rs. 30 to houses damaged by the cyclone. Most of the colonies around the town of Pondicherry were flooded. Karuvadikkuppam, Laspettai, Uppalam, Dubrayapettai and Attupatti (Dr. Ambedkar Nagar) were some of the areas seriously affected. The marooned population was rescued with the help of catamarans fetched from Kuruchchikkupam, a neighbouring fishing village. The very next morning, five relief centres were opened at five different points in the town to arrange for immediate shelter, food and clothing to the poorer sections of the people affected by the cyclone. Fifty bags of rice were made available to the relief centres. 77 The same year on 3 November, another cyclone of mild intensity, but accompanied by heavy rains lashed Pondicherry leaving large areas submerged in water. Nonanguppam, Puduppalaiyam and Vembakirappalaiyam were very much affected.

The worst flood in living memory was the one which occurred in the year 1968. Crops were damaged and many houses collapsed.

The cyclonic rain of October 1969 flooded large areas in Pondicherry region. The Sankaraparani was in spate. Nine persons of a family and a driver who ventured to cross the river were carried away by the currents. In an attempt to rescue them, one police officer and a fire service officer also lost their lives. A large number of houses and huts in the coastal villages were damaged. Large tracts of paddy fields were submerged in water.

A severe cyclonic storm which formed in the Bay of Bengal crossed the coast between Kakinada and Machilipatnam on 7 November 1969. The was accompanied by heavy rains causing damages in Yanam region. As the cyclone was sudden and unexpected, no precautionary measures could be taken by the Administration. The velocity of the cyclone was about 140 km. per hour. People in the entire region stood as helpless spectators against the fury of the storm which passed through the region between 9 a.m. and 3 p.m.

There was no loss of human life, but as many as 1,404 houses were damaged, 863 heads of cattle lost, crops in about 1,530 acres were lost. Damage to public buildings alone was estimated at Rs. one lakh. Rice mills, a cinema hall, the church, the mosque and the temples were damaged. The total loss was estimated at Rs. 19,04,586 for the entire region.

By way of relief, a sum of Rs. 1,19,400 was given as grant to owners of damaged houses. Another sum of Rs. 93,000 was given as housing loans. The fishermen were given Rs. 6,400. Agriculturists in the region were given a sum of Rs. 45,000 for cultivation purposes. A sum of Rs. 5,000 was given as cattle loan. The Government also granted remission of land tax for the year 1969 for the entire region. An amount of Rs. 1,162 was advanced as loan to government servants.

In 1970 there was a flood in the Ponniyam river running along the northern boundary of Pandakkal. But the flood waters receded within 48 hours. Some of the families living on the banks of the river were evacuated. There was, however, no heavy damage to crops.

In the heavy rains of November 1970 in Pondicherry, as many as 2,083 families were affected. Cash relief amounting to Rs. 37,380 was extended to 1,925 flood victims in the region.

Almost every year certain areas of the coasts are exposed to damage by floods in Pondicherry, Karaikal and Yanam. In Karaikal, floods encroach upon agricultural land preventing it from growing full crops.⁷⁸ The occurrence of such floods year after year points to the necessity to provide for permanent flood control and relief measures in the Territory. The emergence of residential colonies in many low lying areas around Pondicherry has been instrumental in raising the level of those areas. Many of the field channels

and drains which existed in these areas have lost all their traces. The outlets of channels like Uppar, carrying the flood waters to the sea, were not always open. In the course of the last many years the drains and channels running around the Boulevard did not receive much attention resulting in accumulation of silt. Nor were there permanent arrangements to open up the mouths of channels in times of floods. As a result, some parts of the town, especially the residential areas alongside the **Petit Canal** running east-west of Pondicherry town towards **Grand Canal**, are subjected to the entry of flood waters. The rain floods emanating from Saram, Sittankudisai, Dhanvantarinagar, Orlayanpet, Venkatanagar, Kamarajnagar, Tattanchavadi also called for proper channelisation.

During the IV Plan one reach of the Uppar drain, starting from Tindivanam road (now Kamarajsalai), reaching upto Villiyanur road was provided with cement pavements. The other reaches were proposed to be covered during the V Plan. The construction of a revetment along Pondicherry sea coast at a cost of Rs. 13.7 lakhs was taken up during 1970-71. As to Karaikal, no improvements have been carried out to the river banks for a long time. A provision of Rs. 4.95 lakhs was made in the III Plan, of which a sum of Rs. 1.82 lakhs only was spent. An area of 1,352 hectares of agricultural land is said to have been protected from the ravages of floods.

Under the Fifth Plan, however, it was proposed to carry out improvements to the bunds of Nandalar, Nular, Arasalar, Tirumalarajanar, Pravadayanar, and Muliyar.

Ponniyam puzha (river) is the only drainage outlet to drain all the flood waters in Mahe region. The river is subjected to tidal action for a distance of about 6 km. from the sea up to Kunduchira anicut. Flood waters usually submerge the Chambad area in Mahe limits. This drain is, however, too small to drain off all the waters coming from the adjacent areas, especially during rainy season. As a major work under anti sea-erosion, protection of the coastal area in Mahe was taken up at a cost of Rs. 4.40 lakhs during 1970-71.

Famines and droughts:

Although we have some information about droughts and famines in Pondicherry, we have no precise data of the famines and droughts in the other regions. Among the four regions, Pondicherry is more susceptible to the vagaries of monsoon and hence more open to the threats of droughts and famines. Karaikal, Mahe and Yanam are relatively more secure from these threats.

The famine of 1687 is the earliest that we learn of from records. Accompanied by drought which was almost total, the famine was marked by extreme shortage of food. It took a heavy toll of lives. People migrated to the Thanjavur region. François Martin arranged for the import of rice by boats to be sold here. ⁷⁹

The famine of 1708 was again accompanied by a severe drought. The price of rice, the staple food of the population, is reported to have risen almost eight times. Private charities were fortunately forthcoming in ample measure. ⁸⁰ The famine was followed by an outbreak of cholera.

Pondicherry again faced acute famine conditions in 1717 having failed to receive rains the previous year. In order to attract food grains to the town all duties and levies on the import of food grains from outside the territory were suspended for 36 days. ⁸¹

As a result of the drought in 1737 there was a severe shortage of rice. The *Conseil Supérieur* of Pondicherry authorised purchase of rice at 50 pagodas per 'garce' for distribution to its employees. The situation improved slightly with the showers late in January 1738. Nevertheless, famine conditions continued to prevail till October 1738 when rice was sold at 80 to 100 pagodas per 'garce'. ⁸²

There was another famine in the year 1747. A large number of dying children and others were converted and baptised. ⁸³

There was a severe famine again in Pondicherry in the year 1760. It is reported "that there was not even a single dog or cat left in the town, all the creatures having been consumed by the hungry population." Rats were sold at Rs. 2 each. Soldiers were obliged to sell their possessions in order to feed themselves. ⁸⁴

Famine struck Pondicherry again in 1844. In view of the extreme drought conditions which prevailed, a rebate was given for the import of rice into the town. ⁸⁵ Again in 1853 following the serious shortage of paddy and other food grains in Pondicherry, all duties on food grains were abolished. ⁸⁶ There was another severe famine in the year 1877 and the Chamber of Deputies in France voted a sum of Rs. 1,00,000 on 2 February 1877 to render assistance to the victims of famine.

The famine conditions which prevailed during World War I and World War II period were caused more by human agencies than by nature. The import of rice and other food grains from traditional sources like Indo-China and Burma was disrupted due to war conditions.

After merger, the Territory never once had to face the predicament of famine although it had to face threats of drought. Pondicherry region was hit by drought during 1968-69 as a result of the failure of the south-west as well as the north-east monsoon leading to withering of crops and scarcity of drinking water. As part of the drought relief measures, irrigation works like desilting of tanks and provision of drinking water supply, like sinking new wells, provision of hand pumps, deepening of wells, sinking of new bore-wells and centrifugal pumps were carried out. According to a survey, 204 hand pumps were installed, 42 tanks were desilted, 85 wells were deepened, 21 open wells were provided. ⁸⁷

Again during 1974-75 some areas in Pondicherry and Karaikal were affected by drought due to failure of monsoon. A sum of Rs. 23.55 lakhs was provided for drought relief operations.

Earth quakes :

Earth tremors have been very rare in all the four regions as none of them are located in areas prone to earth quakes. Nevertheless, records of mild tremors are not wanting. On 16 June 1819, an earth tremor of mild intensity is reported to have occurred in Pondicherry at 7.30 p.m.

In recent times, Yanam experienced a mild earth tremor of very short duration in June 1969. There was, however, no damage.

There are no seismological observation stations anywhere in the Territory.

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CHAPTER—V

INDUSTRIES

I. Old time industries

The classical geographers and the Tamil Sangam literature have left us details of the trade links which existed between the ports situated on the Coromandel Coast and the Mediterranean since the First Century A.D. The exports from here included muslin, silk, pearls, gem stones, ivory, etc. It is significant that the excavations at Arikamedu near Pondicherry have brought to light the existence of tanks and courtyards which, it is conjectured, were used in the preparation of muslin cloth in ancient times. Amongst the other industries which flourished in the town at that time was that of bead making. Gold, semi-precious stones and glass were used for this purpose.,

In 1127 A.D. some families of the pratiloma caste who were weavers by profession accepted some *iraiyili* land at Tirubhuvanai in Mannadipattu Commune and in return undertook to supply clothes to the local temple on specified occasions and in stated quantities.¹ This only goes to show that the area surrounding Pondicherry must have been famous as a manufacturing centre of textiles early in the Twelfth Century.

Kaikkolars were members of an influential community in the Vijayanagar Empire. They lived generally around temple precincts, in separate streets. By profession they were weavers and enjoyed certain social privileges. It will not be far-fetched to suggest that the village of Kakkalippattu in Mannadipattu Commune must have been, at least from the Vijayanagar days, a settlement of Kaikkolars who in the Seventeenth Century migrated to Pondicherry and its vicinity at the invitation of François Martin to feed the European market with the textiles of Pondicherry.

In a letter written in the year 1648, the Council of Madras wrote that the incursions, robberies and devastations carried out by the forces of Golconda and Bijapur "hath wrought a desolation on a great part of the country

round about especially the three principal cloth ports of Tevanapatnam, Porto Novo and Pullacherry." The last mentioned Pullacherry is none other than the modern Pondicherry.

The Danes who had settled in Pondicherry about the beginning of the Eighteenth Century had built up a very lucrative trade in cotton manufactures.² The departure of the Danes, however, dealt a severe blow to the industry, since the inhabitants were deprived of export facilities. The local chieftains were, therefore, interested to attract other Europeans to settle down in Pondicherry and to serve as intermediaries in the export trade. François Martin had this to say in his Memoires about the situation then in Pondicherry: "A little after our arrival at Masulipatam we were solicited by Sher Khan Lody, Governor for the King of Bijapur of the province of Valikondapuram to go and establish ourselves on his territory where there are good manufacturers of cotton textiles. This prince promised us advantageous terms to carry on commerce there. A representative of the Company who visited the locality reported about the goodness of the climate and the fine quality and large quantity of the cotton manufactures in the locality."³

Later when François Martin became the Chief of the French Establishments in India, he encouraged the immigration of weavers to Pondicherry from the neighbouring regions. He also invited cloth printers from various places to come and settle down in Pondicherry with the intention of starting the manufacture of dyes and painted cloth and had also built some sheds to enable those workers to work in the sheds. As trade flourished, merchants in Pondicherry ordered for cloth from weavers in the Carnatic i.e., the country in-between the River Nellore (**Pennar du Nord**) and the Vellar. These merchants advanced money to the weavers in the Carnatic with instructions to produce particular varieties of cloths as per specimen obtained from France.

Karaikal was then famous for the special quality *guingams* (i.e. white cloth with small red stripes). These *guingams* were brought to Pondicherry from where they were exported to Manila. Hence the name Guingam Manila. The varieties called **Guinées du Nord**, **Jamdanis** or **Organdis à fleurs** were manufactured at Yanam.⁴ Machilipattinam was famous for its red colour and check handkerchiefs. Cart-loads of unbleached clothes were brought to Pondicherry to be bleached at 'Moutalpet' (Muttiyalupettai), long considered the home of the most renowned bleachers of India. Generally, the superior

quality unbleached *guinées* were brought from the North either for being bleached or for dyeing in blue. Pondicherry thus became well-known for the high quality of its dyeing, thanks to the skill of its artisans. The dyeing of cloth in indigo blue became widespread in the settlement and the finished products commanded ready overseas market. The cloth required for dyeing was brought to Pondicherry from the neighbouring towns like Kanchipuram, Vandavasi, Tiruvannamalai, Salem, Tarangambadi and Cuddalore. Piece goods were also brought to Pondicherry from Bengal and Orissa. In due course, the town developed into an important trade centre. Warehouses stored with piece goods intended for dyeing sprang up everywhere.

The *toiles du sud* were brought to Pondicherry from Karaikal for being dyed in blue. These cloths were of an inferior quality. Handkerchiefs, also brought from Karaikal, being of an inferior quality, were exported to Batavia.

The blue cloths (*guinées*) were the only items of export which brought some profit to the colony. Two-thirds of the cloth involved in the trade were no more manufactured in this territory but were brought from Salem. Nevertheless, Pondicherry maintained its position as a centre of trade, because dyeing in blue with indigo was not so good anywhere in India than in Pondicherry.

Some interesting details about the old time industries in Karaikal are available to us from a report prepared by Cordier, a Naval Captain, in reply to a detailed questionnaire received from the *Ministère de la Marine*. According to this report there were 26 pottery units in Karaikal engaged in the manufacture of utensils, flower pots, water jugs, etc. Some of the units also produced tiles in their kilns. In the year 1823, as many as 100 brick kilns and 71 brick makers were counted. The same report revealed the existence of 35 oil mills manufacturing coconut oil, gingili oil, besides producing oil from *elipe* (*bassia longifolia*) and laurel seeds. Of the three soap units, two were located in Karaikal and the other in Tirumalarajanpattinam. ⁵

The three coir manufacturers in Karaikal engaged lascars or coolies according to the type of coir to be manufactured. They used six different types of looms for the purpose. The work was carried out generally between January and October every year. ⁶

II. The industrial revolution and after

No significant progress was registered in the field of industry until Desbassyns de Richemont took over as Governor in 1826. He first established the **ateliers de charité** (charity workshops) in order to improve the living condition of the indigent members of the white population, the **topas** or **gens à chapeau** and their descendants. To run these workshops, experienced weavers and dyers were brought from France among whom were Gonfreville, an expert dyer-cum-chemist, besides Flament and Godefroy, the expert weavers. The authorities in France also encouraged the establishment of such workshops and deputed skilled dyers and weavers to Pondicherry to train the local population with a view to competing with British trade by adopting modern techniques. These workshops were under the control of a **Comité de Bienfaisance** and in 1827 Thomas Godefroy, an ex-foreman of a spinning mill in Rouen, was appointed **Chef d'atelier** and Flament, his assistant.

Shortly after, Gonfreville was authorised by the Government to start a dye house and a weaving factory for which land was allotted to him in Muttirapalaiyam. He conducted research for utilising some of the local plants for dyeing purposes and forwarded the results of his research to France for consideration. The early workshops were, however, not provided with adequate machinery. The yarn used by the workshops was of an inferior quality. Godefroy, therefore, found it very difficult to run the workshops without proper machinery. Nevertheless a total number of 133 hands were entertained in the workshops.

Desbassyns was neither satisfied with the research work of Gonfreville nor with the performance of the new weavers in the workshops. He, therefore, encouraged the immigration of weavers to Pondicherry from the neighbouring regions like Cuddalore by providing them houses to live in so as to produce in Pondicherry itself the cloth required for dyeing.

In 1828 the charity workshops (**ateliers de charité**) were converted into weaving factories (**ateliers de tissage**). Buildings for housing the factories were constructed. The flying shuttle slowly replaced the ordinary shuttle.

In 1840 they were redesignated as **Ateliers de Bienfaisance**, only to disappear in 1851 after 25 years of existence. The establishment of these workshops created the required atmosphere and introduced the necessary skill which encouraged private entrepreneurs to start such workshops in the region with modern equipments. ⁷

Large-scale industries :

The **ordonnance locale** of 1826 may be regarded as the harbinger of the Government's new industrial policy. The **ordonnance** of 18 February 1827 paved the way for the industrial revolution in Pondicherry through the introduction of mechanism in the realm of industries. The new **ordonnance** assured that financial assistance would be extended to French citizens coming forward to set up sugar factories, distilleries, etc. in the settlements. Desbassyns who was already toying with the idea of introducing a spinning unit in the **Ateliers de Bienfaisance** wrote to the Ministry in France that the mission of Gonfreville and others would succeed only if necessary looms were sent to Pondicherry for starting a spinning mill on the western style.⁸ About the same time private entrepreneurs in France seemed to evince some interest in starting a spinning mill in Pondicherry. Desbassyns' wish was now very near fulfilment.

Swadeshi Cotton Mills Co. Ltd. :

In 1828 Blin, a businessman settled in Pondicherry and Delbruck, a businessman of Bordeaux, together came forward to start a spinning mill in Pondicherry. They asked for certain concessions from the administration to face the challenge of the British textile industry which controlled the market in India. The concessions asked for included :

- (a) a 20 per cent. grant towards the cost of machinery imported from France,
- (b) a grant to meet the expenses for the immigration of weavers,
- (c) an advance of 30,000 francs to be repaid in six years at an interest of 4 per cent. for the purchase of raw materials,
- (d) free passage for workers and free transport of machinery on the ships owned by the Government,
- (e) allotment of rent-free land for the mill,
- (f) permission to utilise the workers employed in the **Ateliers de Bienfaisance**.

Subsequently, the firm 'Le Prince et Poulain' which supplied the machinery for 'Blin et Delbruck' also expressed its desire to establish a similar mill in collaboration with Doris Junior of Bordeaux. In a letter addressed to the **Ministère de la Marine et des Colonies** on 18 February 1829, the firm expressed its readiness to establish a modern spinning mill within a period of five months with a production capacity of about 700 kg. per day, which was four times the production capacity of the mill first proposed, provided the Administration would accord the same concessions assured to the first firm. Shortly after, the two firms merged to form 'Poulain Duboy and Co.'

In 1831 the mill manufactured only 2,451 kg. of yarn per month. Within another three years, the output increased to about 13,000 kg. per month. Most of the yarn manufactured was utilised for weaving and for manufacturing a particular variety of white and blue bleached cloth which came to be known as "cloth of M. Poulain and Co." According to a report, the products of the mill were displayed in the exhibition held at Paris in 1834 and was mentioned with credit. In 1835, according to Governor De Melay, the mill worked to full capacity with hundreds of people on the pay rolls.* The cloth manufactured with the yarn produced by the mill was held in great demand everywhere and was sold to the best advantage.⁹

All along the mill had to encounter serious financial difficulties and had to face stiff competition from the British textile industry. The mill was expanded in 1838 by the addition of a weaving section. The cloth manufactured in the mill was exported to Senegal and Reunion. To sum up, from 1828 to 1844, the new industry was helped through grants to build up a new cadre of workmen who were relatively rare in India then.

Everything was getting on well until about 1864 when the concept of free trade was gaining ground throughout the world. Countries like Senegal started allowing duty-free the import of all goods irrespective of their origin. The cost of goods manufactured in Pondicherry was comparatively higher than those coming from England and Belgium in spite of the tariff imposed on them at the time of their entry into France. From 1869 the industry passed through a period of decline and in July 1870 the mill had to close down.¹⁰

* From 1-6-1835 to 30-6-1835 the mill bought 108,488 kg. of cotton and produced 94,388 kg. of yarn providing employment for 225 workers inside the mill.

Gustave Cornet, the President of the **Chambre de Commerce** and his associates made strenuous efforts to reopen the closed mill. In 1875 the **Chambre de Commerce** took up the cause of the textile industry and called for the grant of **prime** to the mills either on the cost or on the quantity of the yarn produced by the mill. While on the one hand, the efforts of Gustave Cornet and his associates helped reopen the spinning mill in September 1875, the granting of **prime** by the Administration, on the other hand, encouraged the production of yarn. ¹¹

In 1876, the **Chambre de Commerce** called for certain modifications in the customs regulations. About this time, Senegal permitted the entry into that country a variety of cloth which was even inferior to that manufactured in Pondicherry. As a counter, the system of giving a **certificat d'origine** and a registered trade mark for the goods was introduced in 1877 and the minimum weight of the cloth was also prescribed. ¹²

In 1886 the ownership of the firm changed hands and came to be known as "Savana" with the Central Office at Bordeaux in France. ¹³

In 1902 the looms numbered 454 with a total number of 17,000 spindles engaging 2,500 employees. ¹⁴ In 1956 i.e. two years after the merger of the French establishments with India, the unit was sold to a Kanpur firm and came to be known as "Swadeshi Cotton Mills Ltd." The unit manufactured only grey goods and forwarded them to the parent mill at Kanpur for processing. The raw materials required for the unit are secured locally as well as from the neighbouring State of Tamil Nadu and from foreign countries. The total quantity of yarn spun in 1960 was 15,51,677 kg. and the quantity of cloth manufactured was 1,30,70,736 metres.

Sri Bharathi Mills Ltd., Pondicherry :

A spinning mill by name '**Filature et Tissage Gaebélé**' was started in Mudaliyarpettai in the year 1892. Though this unit came to be firmly established only in 1892 its origin is traced back to 1828. ¹⁵ This mill also passed through the same trials and had to close down with the loss of markets for its goods. It was this mill which was put again to production through the efforts of Henri Gaebélé in the year 1892.

In the year 1902 the total number of looms was 120 with 4,200 spindles and 500 workers inside the mill.¹⁶ In 1921 the mill came to be known as 'Filature et Tissage Kesoram Poddar et Cie.' with which the Kusappalaiyam mill came to be merged shortly after (probably in 1923). The mill passed under Indian management and came to be known as 'the Pondicherry Cotton Mills Ltd.' (1924) and later as 'Sri Barathi Mills Ltd.' In 1942 the number of looms increased to 302. The number of spindles rose to 19,700 and the total number of workers engaged was 1031. The unit was engaged in spinning cotton yarn and manufacturing coarse variety of grey cloths.

In 1960 the total quantity of cotton yarn spun was 7,10,707 kg., the staple fibre yarn production was 2,98,160 kg. and the quantity of cloth manufactured was 45,29,029 metres. The raw staple fibre was secured from Nagda and Indian cotton from Bombay, Rajapalayam and Tiruppur.¹⁷

In November 1965 the mill closed down throwing out of job nearly 1,600 workers. In May 1967 the Government of India decided to take over the management of the mill under the Industries (Development and Regulation) Act, 1967. Although the mill incurred heavy loss from 1967 to 1971, it turned the corner in 1972 showing a net profit of about Rs. 4.00 lakhs.¹⁸

Anglo-French Textiles Ltd. :

This mill, originally known as 'Rodier Mill', was established in the year 1898 by a British firm which had its Central Office in London.¹⁹

In 1899 the mill was provided with a railway branch line with the main Pondicherry-Villupuram railway line to facilitate the transportation of goods.

In 1902 the looms numbered 650 with 40,000 spindles and entertained 2,500 workers.²⁰ The unit was engaged in spinning cotton and staple fibre yarn, in weaving cotton cloth, besides bleaching and dyeing. The required raw materials were secured from the Indian Union and from the United States of America. Since 1924 the mill came to be officially known as 'Anglo-French Textiles Co. Ltd.' The total production of yarn was 49.45 million kg. and fabrics 26.35 million metres in 1960. Licence was issued to Messrs. Anglo-French Textiles Ltd, Pondicherry for the installation of 25,000 additional spindles and 500 automatic looms during 1965-66.²¹

Other attempts:

Another minor development was the issue of a licence in 1864 to Messrs. Paget & Co. to start a yarn factory in Kusappalaiyam. It was this unit which was later merged with Kesoram Poddar & Co.

A yarn factory was started in Uppalam in 1830 on the northern bank of the Uppar, but it functioned only for about 35-40 years.²²

Prior to merger, the three textile mills in the territory were geared to manufacture only special varieties of cloth for the French colonies in Africa. Following merger, the textile industry had to face new problems as their traditional export markets were lost. The cost of production was high as wages here were relatively higher than in the mills in India. The Indo-French agreement, however, provided for concessional treatment to Pondicherry textile imports to French colonies for a period of six months from November 1954. Soon after the expiry of this period, the French Government was requested to extend the period of concession. As the French Government was not inclined to oblige, the Government of India came up with a few measures to help the industry tide over the crisis. From 1 May 1955 the textile mills were exempted from the payment of export duty on cotton cloth produced by them for a period of six months by the Central Board of Revenue, New Delhi. The mills were also permitted to export any quantity of cotton yarn produced by them from the Pondicherry port.²³ From May 1955 the textile mills were partially closed for want of work consequent on the expiry of the period of concession. The mills effected large scale retrenchment of labourers. Among the three mills, one worked partially and the other two suspended production throwing out nearly 6,000 workers out of job. The economic crisis in the textile industry and the managements' action to tide over the crisis led to a conflict between labour and managements which the Government sought to resolve by referring the issues to the Textile Arbitration Committee in 1955.

In 1963 the production of yarn was 7.44 million kg. the bulk being between 11 and 20 counts. In 1964, the three composite mills had a total number of 86,084 spindles with 2,282 looms. Most of the yarn was consumed within the mills and only 0.91 million kg. were released for use in powerlooms and handlooms in the non-mill sector. The cloth produced was 42.56 million metres, mostly of medium quality and the balance of coarse quality.²⁴ Part of this was consumed in India and the rest was exported to foreign markets in Africa and Australia.²⁵

Small-scale industries:

Prior to merger, the free port of Pondicherry permitted the entry of all goods duty-free with the result that rigorous customs control was in force all along the borders of the territory which hampered the growth of small-scale industries here. Private entrepreneurs were reluctant to invest their capital in small-scale industries because their products had on the one hand to compete with foreign goods in the home market and on the other to rely on the limited market within the territory. Nevertheless, there were a few small-scale units which were mainly engaged in the production of consumer goods like soap, oil, etc. There were also a few engineering units engaged in supplying spare parts, etc., required by the three textile mills in the town.

Usine Sainte Elizabeth, started in 1902, was a light engineering unit. It consisted of a foundry to which was added a rolling mill and a workshop equipped with modern appliances. Later, the unit was expanded and took up the manufacture of bolts, besides undertaking some welding work.

Some units were engaged in the manufacture of arrack, fine liquors and refined alcohol for use in the preparation of medicines, etc. There were also many rice mills and oil mills in the Territory. One factory attended to such varied functions as oil-crushing, bone-grinding, spinning and weaving. The French Administration also seems to have evinced some interest in the development of an ice factory in Pondicherry.²⁶

There were 73 dyeing workshops engaged in dyeing work, processing annually 400,000 pieces of cloth, each piece measuring 16 metres in length and one metre breadth. There were also 95 indigo factories which developed as off-shoots of the flourishing dyeing industry in the Territory.

Cordier also attests to the establishment of an indigo manufacturing unit at Kottuchcheri in Karaikal in the year 1824. The products of the factory were exported mainly to Madras in bullock carts. Boat building was another important enterprise in Karaikal and a large number of small boats were said to have been constructed in the boat-yards there.²⁷

Cottage industries :

Many families were engaged in hand printing of textiles for the export market. The local pottery industry developed some features which found expression in a new style of architecture. The manufacture of papier mache and terracotta toys was another popular avocation. Just before *de facto* transfer of the French Establishments, the village industries were badly hit due to the unsettled conditions in the Territory. Many families engaged in cottage industries were forced by circumstances to migrate to the neighbouring States for livelihood.

Mines :

Lignite was found as early as 1883 at Bahur and some other places in Pondicherry region. Seven samples of the lignite analysed in Paris showed an average ash content of 8.35 per cent. A French Company then attempted at compressing the material into briquettes but did not succeed. Permission was accorded in the year 1903 to one private firm to exploit the lignite deposits in 22 villages.²⁸ This venture too did not prove successful.

Interestingly in the year 1914 **Usine Sainte Elizabeth** of M/S. G. Gaudart & Co. is said to have obtained a mining lease over 4,369 acres in the Kanjamalais for exploiting the iron ore. Some iron ore is said to have been extracted and sent to France for magnetic concentration test. The report was found favourable but the outbreak of World War I seems to have prevented the working of the concession and the lease was cancelled in 1916.²⁹

III. Industries and manufactures of the territory

Soon after merger Pondicherry lost its status of a free port. Restrictions were imposed on the import of foreign goods and the customs barriers put up on the borders prior to the merger were removed.

The Administration, at the same time, came forward to help the growth of industries in the Territory in various ways. The Directorate of Industries started functioning from 26 November 1955 and the benefits of the First Five Year Plan, then on the last lap of the quinquennium, were extended to the Territory.³⁰ A sum of Rs. 70,000 was spent during the First Plan period.

There were no reliable means to assess the scope for the development of any particular industry in the Territory. Therefore, when proposals for the II e Year Plan were finalised, a lump sum allotment of Rs. 20.00 lakhs was made for Village and Small-Scale Industries.³¹ Progress was, however, slow due to lack of machinery, buildings and skilled personnel, etc.

In 1958 the Government of Pondicherry requested the Small Industries Service Institute, Madras to conduct a survey of the Territory to study the scope for expansion of the existing industries and the possibilities for establishing new industries. The report of the survey, which was carried out by the Economic Investigation Branch of the Small-Scale Industries Service Institute, Madras, was submitted in March 1959. In the context of the conditions prevailing immediately after merger the survey identified a few industries which offered scope for development in the small-scale sector.

Based on the recommendations made by the Small Industries Service Institute, Madras, the State-aid to Industries arrêté was passed in 1959. Licences were issued for starting units for the manufacture of various items like umbrella ribs, cycle chains, steel trunks, wire nails, bolts and nuts. A local firm was given licence for assembling 7,500 cycles a year. Various other units were given import licences for machinery and raw materials for the manufacture of gem clips, paper pins, etc.

An Extension Centre for General Engineering of the Small Scale Industries Service Institute was started in Pondicherry on 6 July 1960. In 1966 the Centre shifted to its own premises located adjacent to the Industrial Estate, Tattanchavadi. Its chief function is to provide technical guidance and assistance to small-scale industrialists in the Territory. The Centre also functions as an Information Centre providing useful information on technical matters relating to small industries. The Centre organises from time to time training programmes for artisans in the Territory, besides providing common facility and laboratory assistance. It has developed special dies and punches required by sheet metal, ceramic and pharmaceutical industries and special moulds required by plastic industries. It is now equipped with a Sand Testing Laboratory. Till March 1973 the Centre had trained 173 artisans.

Even during the II Plan period attempts were made by the Bureau of Statistics to collect industrial statistics on a voluntary basis which, however, did not prove successful due to lack of co-operation on the part of industrial units. The Administration was, therefore, impressed on the need to extend the Collection of Statistics Act, 1953 to the Territory to provide a statutory basis for the collection of industrial statistics. The Act was extended to the Territory and the first Annual Survey of Industries was conducted in the year 1962. *

The Third Plan outlay on 'Industries' was increased to Rs. 30.50 lakhs, nearly half of which (Rs. 13.50 lakhs) was meant for the two Industrial Estates proposed to be established at Pondicherry (Manappattu) and Karaikal (Kottuchcheri). ³² The expenditure actually incurred was Rs. 26.10 lakhs. A sum of Rs. 3.22 lakhs was spent for the development of the handloom industry. New spinning mills were licensed. A sugar mill started production. A number of small-scale industries came to be established in the Territory one after another. A steel rolling mill was also registered with the Iron and Steel Controller for a capacity of 4,800 tonnes per annum. A major achievement of the Third Plan was the completion of the Industrial Estate at Tattanchavadi. ³³

In January 1964 the National Council for Applied Economic Research was requested to undertake a techno-economic survey of the Union Territory. The principal objective of the survey was to make an appraisal of the various resources of the Territory and to assess its immediate as well as long-term economic and industrial development possibilities, having due regard to the size and location of the four scattered regions. The Council agreed to undertake the survey at a cost of Rs. 30,000. The final report which was submitted in August 1965 recommended feasible developments in various fields over a ten-year period viz. 1966-76 and also suggested 'approximate phasing of major developments in the Territory. The three-year period from 1966 to 1969 marked the phase of annual plans almost amounting to a plan holiday. The Fourth Plan was delayed and the recommendations of the Techno-Economic Survey did not have any immediate impact.

* This survey covered only the factory sector, i.e., factories employing twenty and more workers without the aid of power and factories employing ten or more workers with the aid of power. As such, the survey does not present a complete picture of industries in the Territory.

According to the Annual Survey of Industries, the number of industrial units in the factory sector in the Territory increased from 54 in the year 1962 to 72 in the year 1968. Investment by way of fixed capital in all industrial units increased from Rs. 14.28 lakhs to Rs. 16.36 lakhs. Working capital actually decreased from Rs. 1.83 lakhs to Rs. 1.52 lakhs. However, during the same period, employment in the industries is said to have increased from 10,597 to 11,627 in 1968. 34

The work on the Rural Industrial Estate at Karaikal and Pondicherry spilled over to the Fourth Plan. The first Service-cum-Facility Workshop started functioning at Villianur, while work on the remaining two workshops spilled over to the period of Annual Plans. 35 The State-aid to industries arrêté was replaced by the Pondicherry State-aid to Industries Act, 1970 and a Board of Industries was constituted under the provisions of the Act to decide matters connected with the grant of loans, payment of subsidy, etc.

In September 1971, i.e., soon after Pondicherry was declared as an industrially backward area, the Development Commissioner for Small-Scale Industries, New Delhi wanted to have a survey of the Territory conducted to assess its industrial potentialities and to formulate suitable schemes for its development. The Government of Pondicherry also requested the Small Industries Service Institute, Madras, to take up the survey.

The report which was submitted in 1972 indicated the lines on which industrial development in Pondicherry could take shape in the future. Its recommendations were expected to form the basis for the formulation of the programmes for the ensuing decade.

Although handicapped by the paucity of resources, particularly of raw materials and by the small size of the home market, the industrial base gained strength through the impact of the Five Year Plans. A fact that cannot, however, be overlooked is that industries are concentrated mostly in Pondicherry and Karaikal regions. Mahe has at least a few units to its credit. But in Yanam the number of units is almost negligible.

In the next few pages is given an account of the industries in the Territory.

Large-scale industries:*Messrs. Cannanore Spinning & Weaving Mills Ltd., Mahe:*

Messrs. Cannanore Spinning and Weaving Mills, Cannanore, were permitted by the Government of India to set up a spinning mill at Mahe. The unit with a capacity of 20,160 spindles went into production in the year 1963-64. The mill did not function well and the workers of the mill went on an indefinite strike from 26 June 1971 demanding the take over of the mill by the Government. A sum of Rs. 9.00 lakhs was paid by the Administration towards working capital and the mill was taken over by the National Textile Corporation on 24 February 1972.³⁶

Messrs. Soundararaja Mills Ltd., Nedungudu, Karaikal:

Messrs. Soundararaja Mills Ltd., Dindigul, was authorised in 1962 by the Government of India to set up a spinning mill at Karaikal with a capacity of 12,000 spindles. The mill went into production during 1964-65. Later on, the management was authorised to increase its capacity from 12,000 to 25,000 spindles.³⁷

At the end of the Third Plan period (1966) the employment potential in all the five textile mills was of the order of 9,000. The total production of cloth and yarn in the mills was of the order of 50.1 million metres and 9.4 million kg. respectively. In 1971 the textile mills together (5 Nos.) had 1.23 lakh spindles and 2,668 looms. The total investment was about Rs. 780.00 lakhs. The total output in yarn and in cloth was to the tune of 9.40 million kg. and 52.8 million metres respectively.³⁸

New Horizon Sugar Mills Ltd., Ariyur:

Licence was issued by the Government of India in the year 1957 to set up a sugar factory in the private sector. The mill was erected at Ariyur and went into production in September 1960 with a crushing capacity of 800-1000 tonnes per day to start with.³⁹

The crushing capacity of the mill was subsequently (1965) increased from 1,200 tonnes to 1,500 tonnes per day. The total output of the mill was about 18,600 tonnes in 1968-69, 17,100 tonnes in 1969-70 and 17,290 tonnes in 1970-71. The mill provides employment to about 500 persons during off season and about 950 persons during the crushing season.

The factory does not experience any difficulty in getting its raw materials, though it has to obtain the required quality of lime (with 80 per cent or more Ca content) from Dronachalam in Andhra Pradesh.⁴⁰

The mill obtains its sugar-cane from the local farmers as also from outside the Territory. The by-products of the sugar mill are the molasses and the press mud. About 8,000 tonnes of molasses are available per annum and they are made use of by the Government distillery. About 6,000 tonnes of press mud obtained per annum are sold to agriculturists.

Small-scale units :

The small-scale industry registered significant progress only after independence. The number of units is said to have increased from 85 in 1951 to 472 by 1973. This however, warrants an explanation. The growth pictured here indicates only the number of units registered with the Directorate of Industries. It must be noted that there are a number of industrial units in the Territory which would fall within the description of small-scale industries but are not registered with the Directorate because registration is not a pre-condition for establishing a small-scale unit. The number of registered units do not, therefore, indicate the actual number of small-scale units in the Territory. All manufacturing units with an investment not exceeding Rs. 7.50 lakhs on plant and machinery are defined as small-scale industries. While this definition covers only establishments engaged in manufacturing processes, it does not include such servicing establishments as rice mills, oil mills, etc. and such essential service establishments as saloons, laundries etc.

A satisfactory image of the industrial economy of the Territory will emerge only if all the above mentioned categories of industries are dealt with. An attempt has been made here to present, in as broad a canvas as possible, the true dimension of the Territory's industry.

Mechanical industries:

Agricultural implements: Though of recent origin, the industry's growth has been marked, keeping pace with the demand for modern implements from the agricultural sector. In 1959, the Small Industries Service Institute, Madras, recommended the establishment of such units for the manufacture of agricultural implements to meet the growing requirements of the Territory which was

predominantly an agricultural area. The 1959 survey pointed out that Villiyanur fast becoming a market centre for surrounding villages, and Pandacholanallur having a large number of blacksmiths and carpenters, were suitable for setting up units for the manufacture of agricultural implements in the Territory. 41,

As on 31 March 1973 there were sixteen registered units in this Territory, eleven in Pondicherry region and five in Karaikal region. They are engaged in the production of traditional implements and also such modern tractor-drawn implements as cage wheel cultivators, trailers, etc. All the products are marketed locally except tractor drawn trailers which are in demand in the neighbouring districts of Tamil Nadu. 42

Re-rolling Mills : The Annuaire refer to the establishment of a rolling mill in Pondicherry as early as 1911 43 (*Vide* p. 554). Chartres Molony in his "A Book of South India" alludes perhaps to the same rolling mill as belonging to the family of Gaudarts. The rolling mill was subsequently sold to an English company. Following the imposition of tariff on imported iron by the Government of British India, the Pondicherry iron works had to be closed down. 44 After merger, the rolling mill is said to have gone into production in the year 1959. This unit was also recognised as a registered re-rolling mill by the Ministry of Commerce and Industry. 45 Another such unit was set up in Pondicherry on 20 April 1968. The two units manufacture non-ferrous rods and allied items, M.S. rods, 'Z' angles, 'T' angles, gate channels and flats. Together the two units have attracted an investment of Rs. 4.82 lakhs as fixed capital and Rs. 7.00 lakhs as working capital with a production capacity of Rs. 82.00 lakhs per annum. As regards raw materials for these units, allocations of non-ferrous metals are made state-wise from out of the import of the Minerals and Metals Trading Corporation of India and these are reallocated to the Small-Scale Units by the Administration. 46 Billets are supplied by the Iron & Steel Controller. Scrap is obtained from the open market.

There were three steel rolling mills as on 31 March 1973 in the Territory, all in Pondicherry region.

Domestic utensils : About ten *pathar* families residing in Kamatchiamman Koil Street in Pondicherry town and in the vicinity are engaged in the manufacture of brass and copper utensils like *thavalais*, *kudams* and *dekshaws*, etc. The industry is still unorganised and follows the traditional pattern that it

would only be appropriate to call it an household industry. The investment in the industry consists mostly of equipment like hand-driven polishing wheels, *ratanams*, *karavais*, hammers, etc. In 1959 production was estimated at Rs. 1.50 lakhs per annum. The raw materials required for the industry are brass and copper sheets, *vengaram*, *kungetam* and *nagam* (chemicals), besides charcoal and firewood. They are obtained from the local dealers. In certain cases the local dealers supply the raw materials to the manufactures and get the articles made by them on contract wages. The produced goods are sold out in the local markets. Their products do not face any competition even though similar items are imported from the neighbouring State of Tamil Nadu, i.e. from Madras, Kumbakonam and Tiruppur.⁴⁷

There were fifteen such units as on 31 March 1973 in this Territory, eleven in Pondicherry and four in Karaikal.

Aluminium utensils : As on 31 March 1973 there were two units, both in Pondicherry region, engaged in the manufacture of aluminium utensils. The units are of recent origin. The first was started in 1969 and the second the next year. The products are sold in the local market and also in Tamil Nadu. The main raw material viz. aluminium circles, is obtained from the open market.

Cycles, cycle parts and accessories : The Small Industries Service Institute, Madras, which undertook a survey of the industries in Pondicherry region in 1958, pointed out that the existence of a large number of traders dealing in imported cycles and parts with connections all over the country offered good scope for the development of this industry in Pondicherry. Added to this was the existence of a large local market. The value of complete bicycles sold by dealers of Pondicherry in 1957 was Rs. 7.80 lakhs and that of parts and accessories Rs. 0.81 lakh. According to the survey, traders had also enough resources and contacts to push the sales of any new manufacturing unit in Pondicherry almost all over the country.⁴⁸ Licence worth Rs. 3.50 lakhs was given to a local unit for the import of necessary machinery from a German firm to set up its plant in Pondicherry. The unit started manufacturing cycle chains. This unit now manufactures industrial chains also.

Requirements of cold rolled steel strips are met both from indigenous sources and also through imports. The products are marketed in India and has also fared well in overseas markets.

Ferrous and non-ferrous castings : There are in all twelve registered units in the Territory, ten of which are in Pondicherry and two in Karaikal. The units undertake ferrous and non-ferrous casting works, besides manufacturing items such as industrial valves, etc. required for large industries. Cable boxes are supplied to the railways by one of the units.

The requirements of the textile industry for spare parts like cross bars, weighing hooks, twist carriers, levers, filler motion pulleys and spindles are also met by some of the foundries.

This is the small-scale industry which has attracted the largest capital investment viz. Rs. 17.45 lakhs in fixed capital and Rs. 8.88 lakhs in working capital. All the units put together have a production capacity valued at Rs. 13,53,226 while actual production amounted to Rs. 8,67,854 in 1972. ⁴⁹

Stainless steel articles : There are eleven registered units manufacturing hospital, dairy, chemical and domestic equipments out of stainless steel. All except one are located in Pondicherry region. Manufacturers are given licence to import the required raw material under the Actual Users Licence. The items manufactured by the units are marketed all over India.

Steel furniture : There are nine registered units in the Territory, eight in Pondicherry and one in Karaikal. They manufacture mainly items such as almirahs, racks, iron safes, folding chairs, sofa-cum-beds, etc., for domestic and office use.

C.R. sheets (8 MM, 1 MM, 1.2 MM sheets) are supplied to the units through the N.S.I.C. Raw Material Depot. Some of the units have established their reputation in the national market.

Tin containers : There is only one unit under this category in the Territory. The unit produces tin containers and other tin articles. A sum of Rs. 1.00 lakh is invested as fixed capital and Rs. 1.00 lakh as working capital. The unit has a production capacity valued at Rs. 40.00 lakhs per annum. ⁵⁰ Requirements of tin plates are met from indigenous sources. The products are mostly marketed in Tamil Nadu.

Wire meshes and sieves : The only unit in the Territory, located in Karaikal, is engaged in manufacturing wire meshes and sieves. The raw materials are obtained from indigenous sources and the products are marketed locally and in the neighbouring state.

Wire products : There are two units engaged in the production of wire-nails, staplers, pins, gem clips, etc. Requirements of enamelled copper wire are met from imports. Other requirements such as steel wires, etc. are obtained from indigenous sources. The products are marketed locally and in the neighbouring state. Both the units are located in Pondicherry.

Aluminium alloy pistons : Aluminium alloy pistons are manufactured by two units functioning in Pondicherry. The units are not hampered by scarcity of raw materials which are easily obtained from indigenous sources. The products are marketed all over India.

Steel trunks/metal boxes : There are in all ten units, six in Karaikal and four in Pondicherry. The units manufacture items such as steel trunks, meter boxes, school boxes and metal articles out of B.P. sheets, G.P. sheets and aluminium sheets. B.P. sheets (.63 MM) and G.P. sheets, being scarce items, are supplied to the industrialists through the N.S.I.C. Raw Material Depot, at Pondicherry. The products are marketed locally and in the neighbouring districts.

G.I. Buckets : As on 31 March 1973 there were two units manufacturing G.I. buckets in the Territory. Both the units are located in Pondicherry. B.P. sheets being scarce are obtained through the N.S.I.C. Raw Material Depot. The products are marketed locally and in the neighbouring state of Tamil Nadu.

Metric measures, beam scales, etc. : There are three units, all in Pondicherry region, manufacturing metric measures and beam scales. Raw materials are obtained from indigenous sources. The products are marketed mostly in Pondicherry and in the neighbouring state of Tamil Nadu.

Mechanical toys : There are two units, one located in the Industrial Estate, Tattanchavadi and the other at Nellitoppu in Pondicherry, manufacturing baby cycles, bicycles, etc. Almost all raw material requirements are met from indigenous sources. The finished products are marketed within the country.

Iron structural items : There are in all ten registered units engaged in the manufacture of iron structurals. Eight of these units are located in Pondicherry region and two in Karaikal region. They manufacture grills, trusses and other items.

Automobile parts : There are in all four registered units in the Territory manufacturing items such as automobile bushes, bolts and nuts, etc. These units also undertake maintenance and servicing of automobile vehicles. The units have attracted an investment of Rs. 1.36 lakhs as fixed capital and Rs. 0.60 lakh as working capital. All the four registered units are located in Pondicherry region.

General engineering workshops : The general engineering workshops attend to repair of oil engines, motors, centrifugal pumps, etc. They sometimes undertake pipe threading and welding work also. Although the number of registered units in 1972 was only twenty six, there are many more such units which have not been registered as small-scale industries. Among the registered units twenty-three are located in Pondicherry region and three in Karaikal.

Electrical industries :

Electrical accessories : Prior to *de facto* transfer, all kinds of electrical accessories were imported from foreign countries to meet the local demand as well as demand from outside the Territory. Soon after *de facto* transfer restrictions on the import of these goods from foreign countries were imposed gradually with a view to encouraging the establishment of electrical units in the Territory itself.

Licence was issued in 1957-58 to one unit in Pondicherry for the manufacture of electric switches in the small-scale sector. The unit registered steady progress and the Government of India upgraded this unit as a medium-scale industry* and registered it with the Directorate General of Technical Development, New Delhi. With the increase in the requirements of electrical goods, more units came to be established.

* Following the revision of the definition of small-scale industry in September 1966, the unit fell again under the category of small-scale industries.

There were as on 31 March 1973 seven units engaged in the production of chokes, small transformers, band switches, sockets, ceiling roses, battery chargers, rectifiers, power transformers, induction motors, emergency lights, P.V.C. cables, insulators, shackle pins, etc.⁵¹ While most of the raw material requirements are met from indigenous sources, items such as enamelled copper wire and some electrical switch bands are met through imports.

The products are mostly marketed within the country. One of the units also ventured into the export market during 1969 and 1970.

Dry cells : There is one unit manufacturing dry cells in the Rural Industrial Estate at Manappattu. In the small-scale sector this is the only unit of its kind in the region including Tamil Nadu. Its products are mainly used in flash light torches. Being handy, they are made use of as convenient sources of power in instruments like hearing aids, post and telegraph equipments and various electrical and electronic appliances and portable transistor sets. Raw materials required are zinc, manganese dioxide, acetylene black, carbon rods and graphite. All items are imported except manganese dioxide which is obtained from Bangalore. The unit has to contend with competition from larger units.

Insulators : The only unit started in 1971 is located in the Industrial Estate, Pondicherry. Items manufactured by the unit include ceramic insulators like shackle insulators, pin insulators, etc., for overhead transmission lines. Some of its raw material requirements are met from Neyveli. The products are marketed mostly in the neighbouring state of Tamil Nadu.

Electronic industries :

Hard and soft ferrite products : There is one such unit in the Territory. Located in the Industrial Estate, Tattanchavadi, the unit manufactures hard and soft ferrite products. It has an installed production capacity of 60 tonnes. The unit also assembles scientific instruments such as rotameters, monometers, etc. The raw material requirements are met from indigenous sources. The products are marketed within the country.

Radios : At the time of merger there were only two registered units in the Territory, one started in 1932 and the other in 1949, engaged in assembling radio receivers. The unit located in Pondicherry town is a proprietary concern

and the other situated in Mudaliyarpettai is a private limited company. One of the units is also engaged in the manufacture of carbon resistors, radio transformers and radio coils.

The requirements of the units include items like silver, gold-silver, steel chromium, tin, aluminium alloys, adhesives, varnishes and chemicals, valves, resistances, condensers, transformers, loudspeakers, etc. While most of the items are obtained from indigenous sources, some requirements are met through imports. The units are fairly well equipped and are owned by experienced radio engineers. The products are marketed locally. Radios are also assembled on orders. Although the units face competition from imported goods as well as from Indian assembled radios, the price advantage offered by the units render their radios easily marketable. The rapid improvement in the living standard of the people had increased the demand for radio sets in the Territory.⁵² There were as on 31 March 1973 four registered units in Pondicherry region and one each in Mahé and Karaikal.

Chemical industries:

Soap industry: Some years ago there were only four units in the Territory engaged in producing soaps. Of these, three units produced only washing soaps and the remaining one produced both washing and toilet soaps. These units were started between 1949 and 1955 with a total investment of Rs. 1.05 lakhs approximately. In 1957 the output of these units worked out to 132 tonnes, of which toilet soaps accounted for 1.56 tonnes only and production value amounted to Rs. 1.58 lakhs.

Raw materials like coconut oil, groundnut oil, castor and palm oils, mutton tallow, caustic soda, rosin and perfumeries are obtained from dealers both in Madras and Pondicherry. One of the units imports palm oil. Three of the units use the semi-boiling process and one the steam process in which full boiling is resorted to. Imported mutton tallow is supplied to the producers by the Directorate of Industries through the N.S.I.C. Raw Material Depot. Requirements of caustic soda are met from import as well as from indigenous sources.

The units market their products locally and also in the neighbouring towns of Tamil Nadu like Tindivanam, Chengalpattu, Cuddalore, Tiruvannamalai, etc. through retail dealers. Although the units face competition chiefly

from the large-scale units, the higher cost of products of the large-scale units enable the local units to hold ground. Moreover, these units being small are able to adjust their production according to demand. The 1959 survey rated the industry as having moderately good prospects provided manufacturers could obtain the imported components by direct imports as actual users. 53

The popular brand of 501 Tata Soaps are manufactured and supplied by one of the units. Another unit meets the requirements of Railways and Defence Establishments through the D.G.S. & D.

There were ten units as on 31 March 1973 engaged in soap manufacture in the Territory. Seven of them are located in Pondicherry and three in Karaikal.

Candles : There are five registered units in all, four in Pondicherry and one in Karaikal. Requirements of paraffin-wax are allotted to the small-scale units by the Directorate of Industries through the N.S.I.C. Raw Material Depot. The products are marketed locally and in the neighbouring districts.

Paint and varnish : Five units in the Territory manufacture paint, varnish and distemper. Four among them are located in Pondicherry and one in Karaikal. Denatured spirit is obtained from the local distillery. Other requirements are met from indigenous sources. The products are marketed within the Territory and in the adjoining state of Tamil Nadu.

French polish : There were twenty-one units as on 31 March 1973 manufacturing french polish. Seventeen units are located in Pondicherry, two each in Karaikal and Mahe.

Denatured spirit is obtained through the Revenue Department from the local distillery. Other chemicals required by the units are obtained from indigenous sources. The products are marketed in Pondicherry and in the adjoining state of Tamil Nadu.

Pharmaceuticals/fine chemicals : Pharmaceutical industry is one of the important industries in this Territory. In all there are eleven units, ten in Pondicherry region and one in Mahe, manufacturing pharmaceutical goods. The main items manufactured are APC tablets, tinctures, oral liquid syrups, ointments and capsules. The products are marketed throughout the country.

About 75 percent of the manufactured goods are marketed outside the Territory. Bismuth, citric acid, bromine, menthol, clove oil, filter papers, filtering acids, cadmium metals, activated carbon, potassium carbonate, gallic acid are some of the chief raw material items obtained through imports.

Siddha and ayurvedic medicines: One *Siddha Vaithyasala* and three *Ayurvedic Vaithyasalas*, registered as small units, are engaged in preparing medicines in the Territory. Among them two are located in Pondicherry, one each in Karaikal and Mahe. Raw material requirements are met from indigenous sources. They produce such items as *lehams*, *surnams*, etc., mainly to cater to local demand.

Starch: There is one unit manufacturing starch from tapioca tubers. Set up in 1969 in the Industrial Estate, Tattanchavadi by a technocrat with the assistance given by the bank for unemployed engineers, the unit has a total production capacity of 600 tonnes per annum on single shift basis. The final product is sold to the local textile mills and also outside the Territory. The unit is said to experience some difficulty in obtaining adequate quantities of tapioca tubers as these are not regularly cultivated in the Territory. Though the product faces keen competition, it is able to hold ground because of its good quality.

Safety matches: The only unit located in Pondicherry was started in 1955. While among raw materials required, gum arabic and sulphur are imported, other ingredients are obtained from the open market. The products are marketed locally and in Tamil Nadu.

Fire-works: Three units are engaged in manufacturing crackers and fire-works. Two of them are located in Pondicherry and one in Karaikal.

Requirements of chlorite of potash, barium and strontium nitrate, etc., are met from imports through the State Trading Corporation. The products enjoy only a seasonal market and they are marketed mostly in Tamil Nadu.

Chalk: Among the four units in the Territory, two are located in Karaikal region and two in Pondicherry region. The units manufacture both white and colour chalks. Gypsum is obtained from indigenous sources mainly

from Andhra Pradesh and Tamil Nadu. One unit supplies its products to the Controller of Printing and Stationeries, Calcutta. The other units supply the local markets.

Mixed fertilizers : Two units manufacture mixed fertilizers (N.P.K. mixtures of different ratios). The units have a total production capacity valued at Rs. 12.00 lakhs. Both the units are located in Pondicherry. Raw materials such as ammonium sulphate, urea, ammonium phosphate, etc., are obtained from indigenous sources as well as through imports. Allotment of raw material is made by the Directorate of Agriculture. The products are marketed locally and also in Tamil Nadu.

Zinc oxide : One unit in the Industrial Estate at Pondicherry is engaged in the manufacture of zinc oxide. Zinc requirements are met from imports through the M.M.T.C. and from indigenous sources. The products are marketed all over the country.

Salt : After merger, salt industry has once again revived in the Territory. An area of 28 Ha. 34 A 42 Ca. situated at Nallavadu village (Ariyankuppam Commune) was leased out to a party on an annual rent of Rs. 1,611 with effect from 12 September 1966 for a period of 20 years. A licence for the manufacture of salt during 1967-68 was also issued by the Assistant Salt Commissioner, Tuticorin. The party, however, did not pursue the venture. The lands were surrendered and the lease was terminated with effect from 1 October 1968.

In Karaikal, an area measuring 47 Ha. 07A. 71 Ca. in Oduturai village (Niravi Commune) was leased out to a party with effect from 23 September 1967 on an annual rent of Rs. 3,466 for 20 years for salt manufacture. Although licence for salt manufacture was issued as early as on 7 November 1968, no significant progress was registered.

In Yanam, an area of 403 Ha. 06 A. 72 Ca. comprising the four Isukatippa islands belonging to the Yanam Municipality was leased out on 7 August 1970 on an annual rent of Rs. 1,650 to a private party. A licence to manufacture salt over an area of 213 Ha. 32A. in Isukatippa island No. 1 was issued in 1971. Even here not much progress was in evidence.

In the year 1971 a survey was conducted to identify the areas suitable for the manufacture of salt in the coastal belts of Pondicherry region with a view to encouraging the setting up of salt and salt based industries in the Territory. Three sites in Pondicherry region, i.e., Olandai, Nallavadu (Ariyan-kuppam Commune) and Uchchimedu (Bahur Commune) and six sites in Karaikal region, i.e., Oduturai Akkaravattam (Niravi Commune), Vanjiyur (two sites) (Tirumalarajanpattinam Commune), Kilavelly and Ammankovilpathu (Karaikal Commune) have been identified as suitable for salt manufacture.

The four islands in Yanam are also identified as suitable for salt works and marine chemicals. Mahe's weather condition is not found favourable for solar salt works.⁵⁴

Reclamation of zinc and carbon rods from old dry cells : One unit is engaged in reclaiming zinc and carbon rods from old dry cells. The reclaimed carbon rods are impregnated with the help of wax and chemicals through reclamation process and are used again in dry cells. The process consists of cleaning the zinc cans in the used dry cells and using them again as new ones after reclamation. The products are disposed of locally.

Camphor : There were three registered units as on 31 March 1973 engaged in the production of camphor tablets. Among these, one is located in Pondicherry and two in Karaikal. Raw material requirements are obtained from indigenous sources. The products are marketed locally.

Tooth-powder : Three units, located in Pondicherry region, manufacture tooth-powder which is marketed locally.

Glass industries:

Glass silvering, etc. : There are three glass silvering units in the Territory, all located in Pondicherry. Glass plates are procured indigenously and through imports. The imported items are supplied by the State Trading Corporation. The products are marketed mostly in Tamil Nadu.

Glass products : There are two units, one each in Pondicherry and Karaikal, producing decorative glass boxes, glass show pieces and glass miniature models. Requirements of glass are met from indigenous sources. The products are sold locally and in the neighbouring state.

Plastic industries :

Plastic goods : There are five units, one in Karaikal region and the remaining four in Pondicherry. The units manufacture such items as polythene lay-flat tubes, bags, sheets, plastic canes, injection moulded articles, celluloid bangles, etc. The actual production in 1970-71 was valued at Rs. 7.30 lakhs. In spite of keen competition from large-scale units these products enjoy a ready local market. The products are also sent to other marketing centres with comparative ease.

HDPE woven sacks : One unit located in the Industrial Estate, Pondicherry, is engaged in this line of production. The unit manufactures high density polythene woven bags for packing fertilizers, pesticides, etc.

Raw material requirements are met indigenously and from imports through the State Trading Corporation. The products command a nation-wide market.

Nylon buttons : One unit in the Territory manufactures nylon buttons. The unit is located in the Industrial Estate, Pondicherry. Raw materials are obtained from indigenous sources. To a certain extent imports are allowed on a restricted basis through the State Trading Corporation. The products are marketed all over the country.

Food processing industries :

Confectionary/bakery : There were twenty-eight units as on 31 March 1973 engaged in manufacturing wheat products, confectionary items, etc.

Sugar and maida required by these units are supplied by the Directorate of Civil Supplies. The other requirements are met from other indigenous sources.

Coffee roasting and grinding : There are six units registered as small-scale units in the Territory catering to local requirements. Some of the units obtain their requirements of raw seeds by participating as members in the open auctions held by the Coffee Board periodically at Bangalore and Coimbatore. The other units get their raw materials from the local market.

Aerated water : Nine units are engaged in producing aerated water drinks in the Territory. Raw material requirements are met from indigenous sources. The units in Pondicherry, being relatively small, face competition from large-scale units selling popular brands. One of the units in Karaikal has an established market for its products in Kumbakonam, Mayuram, Thiruvavur, etc.

Liquor : One unit is engaged in producing liquors like brandy and whisky with a total investment of Rs. 5.00 lakhs under their own brand names. The unit is located in Pondicherry.

Ethyl alcohol is obtained from the local distillery. Requirements of flavouring essences are met through imports. The products are marketed all over the country.

Vermicelli : Among the five units manufacturing vermicelli in the Territory, three are located in Pondicherry and two in Karaikal. The required maida is supplied by the Directorate of Civil Supplies. The products are marketed in the Territory and in the surrounding districts.

Ice products and ice-cream : There were in all five registered units in the Territory, four in Pondicherry region and one in Karaikal, manufacturing ice, ice-cream, etc. Ice blocks are sold to parties engaged in the procurement and transport of prawns from Pondicherry to places like Cuddalore, Cochin, etc.

Pickles : Among the three pickle manufacturing units in the Territory two are located in Pondicherry and one in Karaikal. The units cater mainly to local requirements.

Tobacco products : There are five registered units in the Territory, all located in Karaikal region, engaged in the manufacture of cheroots and chewing tobacco. They market their products in the region and in the neighbouring state.

Popcorn : The only unit of its kind in the Territory is located in Karaikal. The unit obtains all the raw materials required from indigenous sources and markets its products locally and in the neighbouring towns, besides doing good business during fairs and festivals.

Wood based industries :

Wooden furniture : At the time of merger there were three well established furniture making units (1959), besides individual carpenters spread all over the Territory engaged in the production of furniture required for offices, restaurants, houses, etc. The units also produced building accessories, doors, windows and other wooden products such as looms, carts, etc. The earliest among the three is said to have been started by a skilled carpenter sometime during the first decade of this century. The second one was started in 1950 and the third in 1957. The raw materials such as teakwood, mahogany, rose wood, plywood, hard-ware and various kinds of jungle woods and varnishes are obtained generally from Tamil Nadu, Kerala and Mysore.

These units manufactured goods mostly against orders from Government Departments and did not face much competition in marketing their products except from those outside the Territory. The 1959 survey rated the industry as having 'moderately good prospects'. But from the point of view of demand alone the industry was rated as having 'excellent prospects.'⁵⁵

With the growing demand for wooden products among the public and with the increased construction works undertaken by the Government for the implementation of various plan schemes in the Territory, the industry flourished. There were as on 31 March 1973 twenty-eight registered units spread all over the Territory. Most of the units cater mainly to local requirements and fulfil orders from parties in the neighbouring state. One of the units, attached to the Ashram, produce sophisticated items of furniture which are supplied to institutions of national and international reputation like the State Bank of India, Air-India, etc.

Boat building : There were two boat building units in the Territory, one at Ariyankuppam and the other at Manappattu. They manufacture special type of rowing boats and fishing trawlers. The requirements of the Directorate of Fisheries for fishing trawlers and for rowing boats by the Directorate of Information, Publicity and Tourism are increasingly being met by these boat units.

The units obtain their wood requirements from Kerala and Mysore.

Rubber based industries :

Tyre retreading : There is only one retreading unit in the Territory. Orders for tyre retreading are obtained locally and from the neighbouring districts.

Leather based industries :

Leather goods : In all six registered units are engaged in producing leather goods. Among these, five are located in Pondicherry and one in Karaikal. There are many more unregistered units.

One of the units located in Pondicherry town manufactures calipers and shoes for the disabled. The requirements of the local hospitals are also met by the unit from time to time.

Paper based industries :

Handmade paper : Licence for setting up a handmade paper unit in the Territory under the private sector was issued through the Khadi and Village Industries Commission. The unit, largely financed by the Khadi Commission through grants and loans, was commissioned in December 1959. It has a production capacity of 30 tonnes. The unit manufactures a large variety of handmade papers and stationery articles. Its products are marketed all over India. The unit first entered the export market in the year 1969 and exported paper and such stationery items as pads, envelopes, etc. 56

Paper products : There were three units in the Territory as on 31 March 1973, all located in Pondicherry region, manufacturing such varied items as cardboard boxes, envelopes, paper bags, etc. Local pharmaceutical units are the main consumers of cardboard boxes. Items such as envelopes and paper bags are sold locally and in Tamil Nadu.

Printing presses : There are twenty-one registered units in this Territory engaged in printing and bookbinding. The All India Press is the only unit of its kind in South India undertaking photo composing in English, French, German, Italian, Hindi, Marathi, Sanskrit, Gujarathi, Assamese, Nepali and Bengali. Sri Aurobindo Ashram Press, another unit attached to the Ashram, also does printing work in Tamil, Oriya, Kannada, Punjabi and Chinese apart from some of the languages mentioned above. Sri Aurobindo Ashram Press had been exporting its products since 1961.

Bookbinding : While most of the printing presses undertake book-binding work, there are a few bookbinding units in the Territory which do not fall under the category of registered small-scale industries. The emergence of the printing industry in Pondicherry helped the growth of bookbinding in turn. The standard and quality of bookbinding work was so good that one of the skilled craftsmen (Shri Sengol) of Pondicherry was awarded a certificate of merit by the French Administration. Books are received from France and some other European countries for binding here. Leather binding of books with gold embossing is a speciality.

Cement based industries :

Cement products : Ten units are engaged in producing various cement products in the Territory in the small scale sector. Six of the units are located in Pondicherry region and three in Karaikal region. They produce mosaic tiles, ornamental grill works, cement pipes, tiles, hollow bricks, well rings, etc. Products are marketed locally and in Tamil Nadu.

Miscellaneous industries :

Bricks : The Territory has large deposits of good quality clay and brick making is resorted to by a number of persons in villages like Muttirappalaiyam, Ozhukarai, Kommapakkam, Odiyambattu, etc. producing annually about 150 lakh bricks. Brick making is not resorted to as a full-time job and the kilns are burnt mostly during the non-rainy season. Brick makers do not, therefore, engage labour on a regular basis. Labourers are entertained mainly for cutting or moulding bricks and for preparing and arranging the kilns.

Bricks of the following sizes are manufactured in the region :

- | | | | |
|--------------|----|----|-----------------------------|
| 1. Large | .. | .. | 9" x 4" x 2 $\frac{3}{4}$ " |
| 2. Medium | .. | .. | 9" x 4" x 2 $\frac{1}{2}$ " |
| 3. Small | .. | .. | 9" x 4" x 2 $\frac{1}{4}$ " |
| 4. Chotos | .. | .. | 6" x 4" x 1 $\frac{1}{4}$ " |
| 5. Kindi | .. | .. | 8" x 3" x 1 $\frac{3}{4}$ " |
| 6. Achchakal | .. | .. | 8" x 4" x 1 $\frac{1}{2}$ " |

Clay is mostly obtained from the lands belonging to the manufacturers themselves. In certain cases, clay lands are taken for specified periods on a fixed rent. (Rs. 150 per annum for one *kani* or $1\frac{1}{4}$ acres or 50 Ca.) The old method of stack burning is still being followed here. The capacity of stack varies from 80,000 to 3,00,000 bricks.

The products are sold by the manufacturers directly to the parties concerned or to the building contractors and they do not face any competition from outside. Sometimes builders themselves resort to brick making to meet their own requirements.⁵⁷

There were only two registered units as on 31 March 1973, one at Tavalakuppam and the other at Tondamanattam in Pondicherry region.* Although the industry is rated as having 'excellent prospects', entrepreneurial effort in this direction had been lacking.

*Power - looms*** : In 1965 the Techno-Economic Survey pointed out that, apart from the mill sector, the Territory had some share of power-looms and handlooms, and placed the number of power-looms at 165 and handlooms at 3,368.⁵⁸ There were also a few power-looms licensed by the Textile Commissioner. Some of the power-looms in the Territory were engaged in the production of art silk fabrics.⁵⁹

In May 1966 the Territory was allotted 310 power-looms which were subsequently increased to 500 in June 1968 with a view to replacing gradually the handlooms in the Territory. This allotment followed the recommendation of the Ashok Mehta Committee set up by the Government of India in January 1963 to study the problem of the power-loom industry in the country. The looms so allotted were meant to be distributed to individual weavers, institutions and uni uts;the co-operative sector. In all 130 power-looms were allotted to the Co-operative Sector. These were distributed through the Registrar of Co-operative Societies.

* Brick makers often shift the location of their kiln from one place to another.

** Power-looms do not come under the small-scale sector. They are therefore, not registered as small-scale units.

The power-loom industry was also declared eligible for the grant of loans under the Pondicherry State-Aid to Industries *arrêté* towards purchase of machinery, construction of factory building and working capital upto a maximum of Rs. 50,000 depending on the number of power-looms installed, security offered, etc. All the looms allotted by the Government of India were distributed to various parties and co-operative societies in the Territory.⁶⁰

The 1972 survey also pointed out that the 'main difficulty experienced by the power-loom mills was the non-availability of warped beam from local sources* which have to be procured from outside. The survey report referred to a proposal to set up a sizing plant in the Territory which is expected to remove the difficulty experienced by the existing power-looms and encourage the installation of additional power-looms in the Territory.⁶¹

Coir and coir products : Coconut is grown in about 1,500 hectares of which about 630 hectares are in Pondicherry and about 500 hectares in Mahe. The annual yield of coconut is about one crore nuts. In the process of separating the copra from the coconut, the husk is obtained as a by-product. The 1959 survey indicated that fibre from about 96,00,000 coconut husks was available annually in Pondicherry region. The husk is then processed to make various coir products. Some of the husk is burnt as fuel.

About 650 tonnes of fibres are said to be available annually in the Territory. About 1/5 of the fibre is used for making thick ropes for deep sea-fishing. A small portion is also used for the preparation of ropes meant for general use. Mostly members of the fishermen community are engaged in the industry.

Ropes are mostly made by hand. Some families are known to use machines for making ropes. A major portion of the fibre is exported to places outside the Territory.

With a view to helping the artisans engaged in the industry, two co-operative societies were formed, one at Vambakirappalaiyam in Pondicherry region in the year 1957 and another in Mahe region in the year 1961. In spite of all the assistance extended to the societies, both the units went into liquidation.⁶²

There were two units as on 31 March 1973 manufacturing coir, fibre and ropes in the Territory. Both the units are located in Pondicherry.

Umbrella ribs : One unit is engaged in manufacturing umbrella ribs both solid and fluted types, besides profile wire. Licence for this unit was given in the year 1958 and the unit went into production in January 1960.

Raw materials like C.R. steel strips are obtained from indigenous sources and imports. The imports are authorised under the Actual Users Licence. The products are marketed all over the country.

Waste cotton : There are two units in the Territory, both in Pondicherry, engaged in the processing of cotton waste. Cotton waste is obtained from the local textile mills. Processed cotton waste is sent to Madras after meeting the local demand.

Ready-made garments : Two units are engaged in this line of production, One of the units secured an order for the supply of garments to hospitals and supplied postal bags to the Postal Department through the D.G.S. & D.

Block making : There are a few block making units in the Territory catering mainly to local demand. Among these, only two units are registered with the Directorate of Industries. Sophisticated types of block making work is entrusted to firms outside the Territory. Though an adjunct of the printing industry, block making industry in Pondicherry has not made commensurate progress.

Hand bags : There is only one unit in the Territory manufacturing hand bags with cloth and canvas. The unit is located in Pondicherry. Cloth and canvas are obtained from indigenous sources. The finished products are marketed in and around Pondicherry and in the surrounding districts.

Spray painting : Although the number of registered spray painting units is only two, there are many more such units in the Territory which have not cared to register themselves. Both the registered units are located in Pondicherry. The units mostly attend to spray painting of automobiles, motor-cycles, scooters, steel furniture, etc.

Cattle feed : The only unit manufacturing cattle feed is located in Mahe. It has attracted an investment of Rs. 1.08 lakhs. The unit has a production capacity valued at Rs. 0.85 lakh. Raw material requirements are obtained locally and the products are marketed in and around Mahe.

Straw covers for packing bottles : The only unit in the Territory is located in Karaikal. This unit manufactures straw covers for packing bottles. Raw materials are obtained from local sources. The products are marketed locally and in the neighbouring state.

Rice mills : The number of rice mills in the Territory (in the factory sector) increased from six in 1962 to ten in 1968. A study carried out by the Directorate of Pilot Research Project in 1972, however, showed that out of 483 small industrial units in Pondicherry region, 100 were rice mills, and gave the following commune-wise break-up :

Commune	Nos.
Pondicherry—town ..	8
—block ..	7
Ariyankuppam ..	7
Mudaliyarpettai ..	11
Ozhukarai	15
Mannadipattu	17
Villiyannur	14
Bahur	12
Nettappakkam	9
Total	100

The above figure indicates the total number of units holding licence for rice milling. But not all of them function throughout the year.⁶³ Paddy is the principal raw material. Rice bran and broken rice are the principal by-products.

Oil mills: Oil mills too do not fall under the category of small-scale industries and are not registered with the Directorate of Industries as small-scale units. The Directorate of Pilot Research Project indicated that there were 79 oil mills in the region as shown below:

Pondicherry-town	.. ..	20
-block	.. ..	13
Ariyankuppam	.. ..	13
Mudaliyarpettai	.. ..	3
Ozhukarai	.. ..	11
Mannadipattu	.. ..	6
Villiyannur	.. ..	7
Bahur	.. ..	4
Nettappakkam	.. ..	2
Total	.. ..	79

The oil mills are mostly concentrated in Pondicherry and Ozhukarai Communes.⁶⁴

Other units :

Betel-nut powder and tooth powder are some of the other products which are manufactured by some of the small-scale industrial units located in the Territory.

Departmental units :

Soon after the Directorate of Industries was established, the Small Industries Service Institute, Madras, was requested to prepare a few small-scale industrial schemes for the Territory. The Institute furnished blue prints for the following schemes.⁶⁵

Investment proposed

	Rs.
1. Wooden Toy Factory, Pondicherry	1,18,000
2. Leather Goods Manufacturing Unit, Pondicherry	1,38,000
3. Leather Goods Manufacturing Unit, Yanam ..	1,38,000
4. Tannery and Leather Finishing Shop, Yanam ..	3,81,700
5. Handmade Match Factory, Pondicherry	1,77,730
6. Factory for the manufacture of splints & veneers, Pondicherry	1,27,590

Wooden Toy Factory, Pondicherry : This factory was started in April 1956 at an estimated investment of Rs. 1.19 lakhs. In the beginning, the factory manufactured only a few items of toys and in the course of the year the unit made some improvement by undertaking the manufacture of a large variety of toys, especially educational toys meant for children in pre-primary schools. The factory, however, had to restrict its production as its products did not have a ready market in the absence of either a sales emporium or a show-room to push up sales. In February 1958, the National Small Industries Corporation, Madras, was appointed as its sole selling agent. Subsequently with a view to providing training facilities in carpentry and to undertake the manufacture of furniture besides toys, the Wooden Toy Factory was converted into a Wood Working-cum-Training Centre in 1961 with a Foreman (Instructor) to be in charge of the Training Scheme. The Training Centre provided training for 75 candidates during the Third Plan period.⁶⁶ The venture, however, did not prove a financial success. In spite of attempts to prop up the unit by entrusting all government jobs to it, the unit had to be ultimately closed down on 1 November 1972.

Leather Goods Manufacturing Unit, Pondicherry : Though sanctioned in the year 1956, the unit could start functioning only from August 1958 as the receipt of the machinery was delayed. Started at an estimated cost of Rs. 1.38 lakhs, the unit functioned with an initial capacity of 100 pairs of footwear per day. Apart from the manufacture of footwear, training in improved methods of shoe making was also imparted in the unit. A show-room

was opened in October 1961. A Sales Emporium was opened during 1962-63 to improve the saleability of its goods. Though production increased in the early years, it began to decline from 1967-68 onwards forcing its closure in September 1972.

Leather Goods Manufacturing Unit, Yanam : This unit started production in 1960. In about five years the unit developed a tendency towards decreasing production. Soon production touched the level of Rs. 600. Under the circumstances, it was proposed to hand over the unit alongwith the Tannery to the Small-Scale Industries Corporation in Andhra Pradesh. The proposal fell through. Tenders were then called for either to lease out the unit or for its outright sale. The tenders, however, did not evoke any response. The machinery was then sought to be disposed of through the Director General of Supplies and Disposals without success. The question of outright sale was under active consideration.

Tannery and Leather Finishing Shop, Yanam : This unit established in 1958 was expanded during the year 1963-64 with the addition of one more tanning drum and a water heater. This venture too did not prove a financial success. The question of its sale was under consideration.

The proposals for a Handmade Match Factory and a Splints and Veneers Factory were given up as they were not considered economically viable.⁶⁷

Service-cum-Common Facility Workshops : These workshops provide technical assistance and common servicing facilities to artisans and agriculturists in the Territory at very nominal rates. The first workshop started at Villiyanur on 17 August 1963 showed marked progress in the following years necessitating its expansion during 1968-69.

The second workshop in Karaikal started in March 1967 is located in the Rural Industrial Estate Campus. The third unit, located in the Manappattu Industrial Estate, was commissioned on 26 September 1969. All the three workshops attend to repairing of pump sets, oil engines, agricultural implements, etc. They also undertake the manufacture of minor agricultural implements, light structurals, etc. on order. All the three workshops undertake blacksmithy work. The Villiyanur workshop undertakes ferrous and non-ferrous castings by green sand moulding. The Villiyanur and Karaikal Workshops attend to light carpentry work.

The progress registered by these three units may be gauged from the following statement :

Year	Villiyannur		Karaikal		Manappattu	
	1*	2**	1*	2**	1*	2**
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1963-64	N.A.	N.A.	—	—	—	—
1964-65	571	769	—	—	—	—
1965-66	3,695	1,770	—	—	—	—
1966-67	8,814	1,770	—	—	—	—
1967-68	12,151	1,453	1,348	95	—	—
1968-69	11,828	1,537	1,982	127	—	—
1969-70	10,428	1,879	2,831	155	2,645	289
1970-71	12,446	1,434	4,527	194	9,850	872
1971-72	10,299	1,178	4,488	216	11,728	1,152
1972-73	14,386	1,329	4,321	307	12,633	1,264

* Service charges collected.

** Number of artisans / agriculturists benefited.

Industrial Estates :

Among the three industrial estates set up in the Territory as part of the plan schemes, the first one to come up in Tattanchavadi near Pondicherry, was a semi urban industrial estate. Those established at Kottuchcheri near Karaikal and at Manappattu in Bahur Commune are rural industrial estates.

Industrial Estate, Tattanchavadi, Pondicherry : The establishment of an industrial estate in the Territory was one of the schemes included in the II Five Year Plan intended mainly to give a boost to industry by providing the essential infrastructure, viz. power, water, land and factory building required

for setting up industries. The Government first acquired 8.91 hectares of land in Tattanchavadi at a distance of about three km. from Pondicherry for the purpose. The construction of the estate was completed at an estimated cost of Rs. 11.12 lakhs and thrown open to entrepreneurs with effect from 16 February 1963.

The construction of sheds was carried out in a phased manner and allotted to entrepreneurs as and when they were ready. There were as on 31 March 1973 two 'A' type sheds, five 'B' type sheds and 21 'C' type sheds, besides 15 'A' type developed plots and two 'B' type developed plots. The A, B and C type sheds were originally charged Rs. 182, Rs. 132 and Rs. 82 per mensem respectively (at 50 per cent subsidy). The rent was raised to Rs. 224 Rs. 201 and Rs. 129 on 1 September 1966. With effect from 19 February 1968 this was raised to Rs. 447, Rs. 402 and Rs. 258 per mensem.

There were also five godowns, of which three were under allotment to private parties and two under the occupation of the Wood Working Unit. A monthly rent of Rs. 117.30 was charged for the godowns.

Separate plots were allotted to the Wood Working Unit and the Leather Goods Manufacturing Unit for which no rent was collected. The plot allotted to the Pondicherry State Model Weavers' Co-operative Society measuring 0.712 acres or 28A. 82Ca. was subsequently sold to the society for Rs. 8,462 and the amount was to be recovered in instalments. An area measuring 0.56 hectares was sold to the Government of India for setting up an Extension Centre for General Engineering. The Estate Complex also included an Administrative Block, a Canteen, a First-Aid Centre, a Baby Creche, a Geological Museum and a Show-room.

The availability of land, built-in-factory sheds, water and power facilities and the low rent charged for the sheds encouraged the otherwise timid entrepreneurs to venture more and more into the field of industry. This necessitated the acquisition of lands to the extent of 11Ha. 29A. 10Ca. of which an area measuring 7Ha. 11A. 90Ca. has been taken up for development and allotment to new entrepreneurs. On this site, 15 'C' type sheds were being constructed. The remaining stretch of land was divided into 24 'A' and 8 'B' type plots. 'A' type plots are charged an annual rent of Rs. 448 while 'B' type plots are charged Rs. 300.

An evaluation study conducted in 1969 by the Bureau of Statistics and Evaluation, Pondicherry, indicated that there was scope for increasing the production capacity of the units in the Estate through adequate supply of power and raw materials. The study further drew pointed attention to under-utilisation of installed capacity of the units functioning in the estate due to scarcity of raw material and power shortage. The study attributed raw material scarcity to low allotment to the Territory. The Evaluation Study, therefore, proposed that the power scarcity experienced by the units could be overcome by the installation of another sub-station within the Industrial Estate.⁶⁸ A wide range of items like wooden products, agricultural implements, domestic utensils, iron structurals, etc., are manufactured by the units located in the estate.

Rural Industrial Estate, Manappattu : The Rural Industrial Estate situated at Manappattu about 16 km. away from Pondicherry on the Cuddalore road was completed in February 1969. The land for the estate covering an area of 2Ha. 29A. 75Ca. was acquired in July 1967. An additional area measuring 4Ha. 78A. 70Ca. was acquired on 15 July 1969 for the 'Developed Area' programme. The estate has eight 'A' type and six 'B' type sheds. There are also 34 'A' plots in the developed area.

The units functioning in this estate are engaged in the production of hard and soft ferrite products, dry cells, chemical products, french polish, wooden products, besides dyeing and printing of cloth.

Rural Industrial Estate, Kottuchcheri, Karaikal : The construction work of this estate covering an area of 2 Ha. 99 A. 60 Ca. (7 acres 41½ cents) was completed during 1965-66 with a complement of 25 sheds consisting of 14 'A' type, eight 'B' type and three 'C' type sheds, all of which were allotted to entrepreneurs. It was formally declared open on 9 September 1968.⁶⁹

As on 31 March 1973 fourteen units were functioning in the estate manufacturing such items as agricultural implements, domestic utensils, steel trunks, polythene tubing and bags, etc.

An estate for electronic industries : The Industrial Potential Survey conducted by the Small Industries Service Institute, Madras, in 1972 found scope for a planned electronic complex in the Territory. The survey examined

a few items of manufacture of electronic and electrical items in the Territory and proposed the setting up of a functional industrial estate, preferably adjacent to the existing conventional industrial estate at Tattanchavadi wherefrom the available infrastructure facilities could be made use of. The survey pointed out that the functional estate would "create the required climate and actually foster development" of the industry in the Territory. Once the proposals take shape, the survey pointed out, starting of units for the manufacture of electronic equipments, instruments and computer components can be considered at the second stage of development. The survey report expressed the hope that with the setting up of a functional industrial estate in the Territory, there will be a new class of technicians, engineers and entrepreneurs to unlock a new era in the technology which will carve out a special name for Pondicherry in the industrial, particularly electronic map of India.⁷⁰

Industrial co-operatives :

Industrial co-operatives came to be organised in the Territory with a view to helping small artisans, craftsmen, carpenters, mat-weavers, toy makers, brick makers, metal workers, etc., who were found languishing for want of support.

The Directorate of Industries was put in charge of industrial co-operatives with effect from June 1961. There were then nineteen such societies in the Territory engaged in such activities as oil mongering, mat weaving, coir spinning, blacksmithy, toy making, etc. These co-operatives were given technical and financial assistance which, to some extent, helped to revive the handicrafts and provided better facilities for rural artisans.⁷¹

Industrial co-operatives were also made eligible for managerial subsidy, equipment subsidy, reserve fund subsidy, share-capital subsidy and for loans to purchase equipments for the construction of buildings and towards working capital, etc. Out of a sum of Rs. 5.00 lakhs provided in the Third Plan for the development of handlooms, an expenditure of Rs. 3.32 lakhs was incurred by way of financial assistance to the Weavers Co-operative Societies in accordance with the pattern approved by the All India Handloom Board, viz. towards payment of rebate on sale of handloom cloth, managerial subsidy, interest subsidy, etc.

Out of about 4,000 looms in the Territory, 2,916 looms are said to have been brought under the co-operative fold. According to an estimate made in 1966 there were twelve co-operative weavers societies in the Territory with an average monthly production of 4,57,000 metres of cloth.⁷²

In 1969 there are 21 industrial co-operatives with 875 members and a share-capital of Rs. 61,740.⁷³ As on 30 June 1970 there were 23 industrial co-operatives in the Territory, 17 in Pondicherry, four in Karaikal and two in Mahe. Out of these, seven industrial co-operatives functioned under the auspices of the Khadi & Village Industries Commission. An investigation conducted sometime later showed that only nine units were functioning properly. The same year, orders were passed for the liquidation of five societies.

The industrial co-operatives were transferred to the care of the Registrar of Co-operative Societies, with effect from 1 July 1970.

Cottage industries and handicrafts :

A comprehensive survey of the handicrafts of the Territory was first attempted at the time of the 1961 census with a view to throwing some light on the traditional crafts having a cultural link with the past. The study identified in all 19 crafts which were of particular significance to the Territory. Of these, toy making, bronze image casting and korai grass mat weaving are of greater artistic value.⁷⁴ Another survey of the handicrafts in the Territory was undertaken by the All India Handicrafts Board in April 1964. This survey studied the economics of the various crafts and suggested suitable measures for further development.⁷⁵

The following crafts fall under the category of cottage industries :

- | | |
|------------------------------|----------------|
| — Handloom weaving (cotton). | — Carpentry. |
| — Handloom weaving (silk). | — Blacksmithy. |
| — Dyeing of cloth. | — Cane-works. |
| — Oil extraction. | — Hosiery. |

The following crafts may be mentioned as handicrafts of traditional value :

- | | |
|------------------------------------|---|
| — Korai mat weaving. | — Goldsmithy. |
| — Bronze image casting. | — Perfumery. |
| — Toy making. | — Wood-carving. |
| — Hand printing of cotton fabrics. | — Cutting and polishing of precious stones. |
| — Pottery. | — Agar bathies. |
| — Screw-pine mat weaving. | — Handwoven carpet weaving. |
| — Basketry. | |

Although the manufacture of coir, soap and foot-wear falls under the category of cottage industries, they have already been dealt with under small scale industries.

Cottage industries :

Handlooms (cotton) : The ancestors of the weavers in Pondicherry migrated to this place during the time of François Martin and the craft thrived till the last quarter of the XIX century. We have evidence of the popularity of such varieties as “**Lampasse, Mouchoirs de Vignettes, Silasse and Kambayi**” during the time of Anandarangapillai.⁷⁶ With Pondicherry becoming a free port and following the introduction of land customs around the territory, Pondicherry lost its competitiveness and the craft entered a period of decline.⁷⁷

The industry then passed through a phase of revival during the First World War period. Till a few years before merger, the industry flourished alongside the textile industry when again, as a result of restrictions imposed on the borders and the political turmoil within the settlements, about 2,000 families of weavers were compelled to abandon their profession and emigrate to the Indian Union . ⁷⁸ When after merger a large number of them returned to the Territory, they were helped to organise themselves into co-operatives.

The handloom industry is the most important cottage industry in the Territory providing employment to about 5,000 weavers. Those engaged in this industry belong mostly to the Mudaliar community. There are a few who belong to the Vanniar and other castes. In tune with the policy of the Administration to develop the industry through co-operatives, more than 50 per cent of the weavers were brought within the co-operative fold.

Most of the craftsmen work in pitlooms. Weavers who are members of the co-operative society get the raw materials like hand and mill spun yarn, staple yarn, etc. from the societies which procure them in bulk at cheaper rates. The craftsmen then return the finished products on receipt of their wages. Independent weavers sell them to the dealers in the neighbouring towns or in the open market or to the middlemen who advance money or supply raw materials. Some years ago, a variety of lungis produced here was in great demand in South-East Asian countries. Varieties such as shirting, dhoties, towels, bedspreads, etc., were also manufactured here. In spite of competition from the mills and the power-looms, the industry is still practised by the poorer sections of the people.

Plans are underway to form an Apex Institution for the procurement of raw materials and weaving appliances and to distribute them to the primary societies at reasonable rates and to pool their production for sales. The Apex Institution will also provide training for weavers in advanced techniques of weaving and dyeing.⁷⁹

Handlooms (silk) : Handloom weaving of silk is another traditional craft practised in Pondicherry for more than two centuries by members of the Devanga Chettiar community. The craftsmen are mostly concentrated in Molappakkam and Kuchchipalaiyam villages in Nettappakkam Commune. Some artisans are also found in Kariyamanikkam, Madukkarai and other villages in the same commune. All of them are traditional artisans. The raw materials viz. silk yarn, gold and silver laces are purchased from Kanchipuram, Bangalore and Mysore and the dyes from Madras. They get their designs from the master weavers and from the Design Centre of the All India Handloom Board at Kanchipuram. They produce silk sarrees and blouse bits similar to Kanchipuram designs. With a view to rendering assistance to these artisans, the Government started the Bhadravathi Amman Silk Weavers Co-operative Society, Molappakkam-Kuchchipalaiyam in December 1958. The society was

sanctioned grants, rebate on sales, subsidies for equipment, rent and working capital. The society supplies raw materials to its members and also arranges for the marketing of the finished products.⁸⁰

Dyeing of cloth : Dyeing of cloth is an old time craft of repute (*vide* page 547). At present there are seven registered units engaged in printing and dyeing of cotton fabrics in the Territory. All the units are located in Pondicherry.

Oil extraction : The traditional method of oil extraction is followed by 68 men in Pondicherry, 15 in Karaikal and five in Yanam. In Pondicherry and Karaikal, members of the Vania Chettiar (Saiva) caste are engaged in this profession. The raw materials used mostly are ground-nut, gingili and coconut. Occasionally mango seeds, castor seeds, etc., are also crushed. Palm or sugar-cane jaggery is occasionally mixed to add to the flavour of the oil obtained. The raw materials are obtained from the Territory itself and sometimes from the adjoining Tamil Nadu or Andhra Pradesh. The *ghani* made of wood and driven by bullocks is the traditional tool still in use. Of late, however, owing to mechanisation of oil presses the traditional craft is losing ground, although oil produced in *ghani* is always of a better quality. The Khadi and Village Industries Commission came to the aid of the industry by forming co-operatives among them and providing them with improved Wardha *ghani* loans and grants.⁸¹

Carpentry : Carpentry is one of the traditional crafts followed by the *Asari* community in Pondicherry. Prior to the arrival of the French, they were engaged in the manufacture of wooden agricultural implements, *rathas* and *vahanas* for the chariots to carry the images of gods during the festival times, etc. They also supplied carved wooden doors, windows, beams, rafters, etc. With the advent of the French the use of furniture also spread among the people.

According to the 1961 census, there were in all 398 persons (287 in Pondicherry region, 65 in Karaikal region and 46 in Yanam region) engaged in this craft. The impact of western culture affected their traditional craft. They began manufacturing furniture and wooden articles against orders with the raw materials furnished by the parties and they got the wages for their work either in cash or in food grains.

This is mostly an household industry, although some carpenters work in the workshops put up by their employers. Wooden furniture still seems to hold ground in the Territory against steel furniture as people with taste and the aesthetically minded still go in for wooden furniture. With a view to providing relief to the large numbers of carpenters and blacksmiths in Pandacholanallur village (Nettappakkam Commune) a co-operative society was started in the year 1959 with 27 members. The borse ploughs manufactured by this society are purchased by the Government and supplied to the ryots at subsidised rates.⁸² (*vide* also p. 461).

Blacksmithy : This is one of the hereditary crafts carried on by the people in all the four regions. In Pondicherry and Karaikal the people who attend to this work are known as *karumars*. There were in all 142 in Pondicherry (all male), 39 in Karaikal, 36 in Yanam and two in Mahe. In the past, they supplied such iron and steel implements as knives, sickles, crow-bars, spades, cart wheel tyres, ploughs, etc., which they made from unserviceable scrap and iron bars. For such service they were paid wages or allotted *manyam* lands by the village community. In Pondicherry region the blacksmiths are engaged in making pipes out of iron sheets of 10 or 18 gauge thickness which are in great demand for sinking bore-wells. This craft is also passing through a phase of decline.⁸³

Cane works : The cane industry of Pondicherry is of recent origin (1949). The process adopted is entirely manual and the craftsmen produce such items as chairs, cycle baskets, waste paper baskets, food carriers, cots, etc. Cane and paints are the most important raw materials required by the craft. The entire requirement of cane is procured from outside the Territory, chiefly Mangalore, Hubli, Belgaum, etc.

As cane is available only for two months a year at the above places manufacturers are compelled to procure large stocks of cane for round the year use. The Directorate of Industries encourages the industry by granting financial assistance. Tools are supplied to the craftsmen at half the price to improve the quality of the products. As on 31 March 1973 there were two registered establishments in the Territory, both in Pondicherry. There are said to be good prospects for the industry.⁸⁴

Hosiery : Hosiery too is of recent origin and is carried on by a unit attached to Sri Aurobindo Ashram. Plain cotton socks and banians are made by this unit. The required cotton yarn is obtained from Madurai. The unit mainly caters to the requirements of the Ashram, although the products are also kept for sale to the public in the Ashram's Cottage Industries Emporium. 85

Handicrafts :

Korai mat weaving : Mat weaving is an important handicraft practised in Kakkalippattu, a village in Mannadipattu Commune and Odiyambattu, a village in Villiyanur Commune. The village of Kakkalippattu is situated on the bank of the river Sankaraparani (Gingee river) and to the north-west of Pondicherry at a distance of 19.3 km. About 400 years ago, the village is said to have been the abode of Kaikolavars (Kaikkolar-meaning handloom weavers). In the XVII century when François Martin invited handloom weavers to Pondicherry by offering them incentives, most of them migrated from Kakkalippattu to Pondicherry.

In course of time, Vanniars and Thuluva Vellalas came and settled in the village practising agriculture. Due to adverse seasonal conditions, agriculture became less attractive and the mat weaving industry began gradually to spread in the village. About 120 years ago, it is said that Muslims used to visit the village every season when the *korai* grass was in full growth. They used to stay on in the village till the entire grass in the river bed was exhausted. Those villagers who assisted them in cutting and processing the grass gradually learnt the craft. In due course, it became the subsidiary occupation of the villagers themselves. In 1943 a flood in the river is said to have uprooted and removed the entire growth of *korai* grass from the river bed. The villagers, thereafter, had to purchase the grass from Mannadippattu, Villiyanur and Nayinarmantapam and also from Chinnababusamudram and Vandavasi in Tamil Nadu. According to the Handicrafts Survey of 1964, three-fourths of the requirements of raw materials were obtained from Karur. Considering the distance of Karur from Pondicherry (240 km.) the survey recommended that the Administration could explore the possibilities of earmarking a certain portion of land near Kakkalippattu for *korai* cultivation.

The mats are produced mostly with colour stripes, both vertical and horizontal to the warp. Generally they produce mats with red, green, blue or violet stripes. Occasionally they weave mats with designs known as *Chittippoo*, *Thutippoo* and *Vazhaippoo*. The sokkattan mat is a specialit

depicting the squares required for the *sokkattan* game. The mats are generally of three sizes viz., 121.92 cm. x 175.26 cm. 99.06 x 175.26 cm. and 76.20 cm. x 175.26 cm. Occasionally mats of larger size viz., 45.72 cm. x 304.80 cm. used during marriages, etc. are also made. Mats depicting flowers and *sokkattan* are rarely produced. The weavers normally sell their products to merchants or dealers who visit the village from time to time. They also take their products to the surrounding villages or sell them at fairs held at Cuddalore, Pondicherry and Villupuram.⁸⁶ The Kaikalapet Mat Weavers' Industrial Co-operative Society was formed on 30 March 1957 with a view to encouraging the craft. The society was provided with a Design Instructor whose salary was subsidised by the Government. The society produced new items like handbags, decorative table mats, etc. Following the formation of the co-operative society, the responsibility of marketing their goods fell on the society. Some of the mat weavers now sell their finished products to the society.

The mat weavers sell a good number of their mats during *Masi Magam* at Pondicherry, *Panguni Uthiram* at Mailam and *Laksha Deepam* festival at Villupuram. The Handicrafts Survey of 1964 identified as many as 44 establishments out of which 31 establishments carry on their manufacturing activities in their homes, while the remaining 13 establishments carry on their work in the common workshed provided by the Mat Weavers' Co-operative Society.⁸⁷

Bronze image casting : Bronze casting is an old time craft dating back at least to the middle of the XVIII century. At present this craft is practised only in one village viz. Uruvaiyar in Villiyanur Commune of Pondicherry region. The village is located on the southern bank of the river Sankaraparani at a distance of 11 km. to the south-west of Pondicherry town. Even in Uruvaiyar the craft is now practised by only one Asari family, i.e., carpenters. How this has come about is not known. All that one could say for certain is that the craft is being practised by the ancestors of this family for not less than four generations. It is gathered that a *stapathi* had come from Villupuram to execute some orders of a local zamindar. After having executed the orders of the zamindar, he is said to have been persuaded to stay on permanently in the village to attend to other orders. With the passage of time, the family settled permanently in the village and continued the craft.

The images or icons are cast of an alloy of copper and brass obtained in the form of scrap or unserviceable and worn-out vessels made of these metals. These two metals are mixed in the required proportion, melted and the images cast. Brass and copper, clay cakes and wax are the main raw materials required. The other subsidiary raw materials are cow-dung cakes for heating the mould and charcoal for metling the metal. All these raw materials are obtained either from local dealers in Pondicherry town or from surrounding villages.⁸⁸

The craftsmen use very simple tools and implements such as pliers, hammers, files, blowers, chisels, vessels of different sizes, etc.

Images of various gods and goddesses such as Vishnu, Siva, Nataraja, Vinayagar, Subramaniam, Muthumariamman, Parvathi and Kali are mostly made by these craftsmen. The images made are of various sizes viz., 15 cm. to 90 cm. and are of different postures such as sitting, standing, dancing, etc. The artisans have to put in much labour and time for giving a final shape to an image. For instance, it has been estimated that it takes about 200 hours, i.e., 25 days of labour at the rate of eight hours per day to make an image of Goddess Kali measuring 45 cm. and weighing 27.24 kg.

The artisans find no difficulty in marketing their products since they undertake works against firm order and only on getting advance money for them. Almost all the images cast at Uruvaiyar are indented and purchased by the temples in the surrounding villages.

Another craftsman who came to Pondicherry from Swamimalai is also engaged in this craft now. He is working with a unit attached to Sri Aurobindo Ashram. His craftsmanship finds its finest expression in the images of Kalyana Sundarar, Parvathi and Nataraja.

One small-scale industrial unit in Pondicherry town manufactures the famous *kamatchiamman kuthuvilakku*. A great deal of religious significance is attached to this *kuthuvilakku* in South India. In fact every Hindu family takes pride in possessing one such *kuthuvilakku* in the home for purposes of worship. Made of the legendary *panchalogam* (five metals), these lamps represent the cultural tradition of an almost forgotten age.

All the processes involved in making the lamp are carried out manually. The lamps are made through what is called the sand casting method. In all, about ten persons are engaged in this craft and all of them are of the Kammalar community. The members of this unit were given financial assistance by the Directorate of Industries to improve their working conditions.⁸⁹

Toy making : Pottery was a popular handicraft in Kusappalaiyam even prior to the XVIII century. Toy making was practised on a limited scale also in Murungappakkam, Nayinarmantapam, Ariyankuppam and some other villages. Such was its impact that "it was characteristic of the houses that their facades and arches were embellished with clay vases made in Kusappalaiyam. It marked an intelligent use of an industry which flourished in the vicinity of Pondicherry.⁹⁰ In course of time the craftsmen developed the dolls industry to meet the demand for dolls at the time of important festivals. Similar toys made in the adjoining towns like Kanchipuram, etc., also are known as *Puducheri bommai*, probably suggesting the origin of the craftsmen or the craft to Pondicherry. But at present only a few families in Kusappalaiyam attend to toy making. The toys are made of terracotta, papier mache or plaster of Paris.

Originally these toy makers made only terracotta toys painted with water colours and toys of paper pulp which were not durable and for which they had to put in much labour. The use of paint is said to have begun with the arrival of the Europeans in the settlement. The manufacture of papier mache toys is said to be of only recent origin when, a few decades ago, the artisans seem to have learnt this technique from their counterparts in Vandipalayam, Panruti and Kanchipuram in Tamil Nadu.

Important raw materials are clay, paper cuttings, gypsum, limestone, colours and varnish. Subsidiary raw materials used are french chalk powder, cement, glue, maize flour (maida), thin iron wire, zinc powder, white lead, copper sulphate, gum arabic, gum benzoin, Belgium chalk powder, linseed oil, turpentine, varnish, kerosene, cow-dung cakes, firewood and straw. Clay is brought from Ariyankuppam, Arumattapuram and Odiyambattu. All other raw materials, except limestone and gypsum, are obtained from dealers in Pondicherry town and from the surrounding villages. Limestone is obtained from Ramanathapuram in Villianur Commune and also from Valudavur in South Arcot. Gypsum is obtained from Ariyalur in Tiruchchirapalli District of Tamil Nadu.

The size of the attractively finished toys range from three cm. to 54 cm. The designs are based on Hindu epics like Ramayana, Mahabharata, etc. These toys are purchased in large numbers in the months of Purattasi for decorating the *Navarathri kolu*. Toys are also in great demand during *Dasara*. Christians prefer toys depicting the images of Virgin Mary, Baby Jesus and St. Joseph for decorating the cribs during Christmas. The demand from educational institutions is for toys of educational value. The special type of spring toys throb as if with life even at a slight blow of breeze. The Gitopadesh chariot made of plaster of Paris and those of Lord Nataraja are purchased by the rich for display in their drawing-rooms. The late Vaithilinga Pathar of Kusappalaiyam was a doyen among toy makers. The Gitopadesh chariot designed and made by him secured for him the title of "Master craftsman" and the National Award for creating an outstanding masterpiece in the year 1964.⁹¹

Prior to the formation of the Toy Makers Co-operative Society, the toy makers used to sell their products to dealers in Pondicherry and also to the toy merchants in Madras, Bangalore, Tiruchchirapalli, Salem, Coimbatore and Bombay.

Handprinting of cotton fabrics : Handprinting of cotton fabrics through the block printing process flourished even during the French period, the products having an assured market in France and French Overseas Territories. According to the survey conducted during the 1961 census, about 2,000 persons in Muttiyalupettai, Mudaliyarpettai, Villianur, all in Pondicherry region were engaged in this craft. The craftsmen obtained the designs from the Weavers Service Centre of the All India Handloom Board at Madras and also from private parties. Chemicals and dyes are obtained from Madras and the plain white cloth from handloom weavers and textile mills in Pondicherry. Although the craft was found to be languishing in 1965, it was reported to have revived subsequently.

There were six handprinting units producing such varieties as *Kalamkari*, *Batik*, *Picasso* and pen art. The situation had so changed that dearth of skilled craftsmen seems to bog down the growth of this craft.

Pottery : From time immemorial, Pondicherry's name is associated with pottery and pottery craft. In the site of Arikamedu (near Virampattinam) where the existence of a Roman settlement was brought to light, were found specimens of a local pottery ware. The excavations of Casal have shown that

“the potteries found in and around at the time of digging (in Suttukanni) belong to the same type (red, red and black, black) which [were characteristic of those found in the megalithic site of Muttirappalaiyam and in the lower reaches of Virampattinam. ⁹²

The pottery craft is now carried on a limited scale at Murungappakkam, Nayinarmantapam, Ariyankuppam, etc.

Only members of the Kusava or Kuyavar community are mostly engaged in pottery.* Male members of this community add the title *Pathar* to their names. In Karaikal region, Vellalars are engaged in the craft. The 1961 census enumerated in all 120 potters (males only) in Pondicherry and 61 (males only) in Karaikal. Of these, 64 in Pondicherry and 22 in Karaikal region are said to be very highly skilled. In Yanam 77 potters including 24 females were counted. All of them work with potters' wheel.

The main raw material required for making earthen vessels is clay which is available in abundance in all those villages. The earthen vessels are manufactured against orders from dealers or for personal use. The artisans also take them to the neighbouring villages for sale. The study conducted at the time of the 1961 census pin-pointed the growing preference among the public for aluminium, brass and copper vessels. With the growing popularity of brass and copper utensils and stainless steel articles among the public, the craft is slowly losing ground.⁹³ The rivalry of ceramic industry, lack of organisation, improved tools, techniques and marketing facilities are said to be the other reasons for its decline.

Screw-pine mat weaving : This craft is being carried on in two villages in Pondicherry region. The screw-pine leaf is taken from screw-pine plants, popularly known as *thazhampoo chedi* grown widely on the banks of Sankaraparani river.

The process adopted for screw-pine mat weaving is similar to the weft and warp method. But strips of leaves are used both as weft and warp and woven by inter-locking them. Mostly mats and small baskets are produced. The survey conducted during the 1961 census revealed that out of forty-seven artisans engaged in this craft, all of whom are muslim women, twenty-three are within the co-operative fold (in Sultanpettai) and the rest independent.⁹⁴

* They are now called Kulalar.

Basketry : The 1961 census revealed that in Pondicherry region 15 males and 35 females, all of them Kuravar by caste, were engaged in the craft. In Karaikal about 20 persons (Naidus and Vaniars) are engaged in this craft. They produce baskets of different sizes and shapes, sieves, winnowing trays, etc., out of bamboo and the mid ribs of the leaves of country date palm. Most of the Kuravars engaged in this craft are nomads who go from village to village where date palms are found to grow. They sell their products in the villages and also during festivals at Virampattinam, Villianur and Pondicherry during *Masi Magam*.⁹⁵

Goldsmithy : There were 125 goldsmiths in 55 villages in Pondicherry region, 82 goldsmiths in eight villages in Karaikal and 22 goldsmiths in six centres in Yanam and five in Mahe according to the 1961 census. The goldsmiths in Pondicherry and Karaikal are known as Thattars and belong to the Asari community. They manufacture not only ornaments in gold of different carat purity but also bowls, plates spoons, tumblers, images of gods and goddesses, *kuthuvilakku*, sprinklers for rose water and a variety of other articles of day to day use in silver. They also manufacture golden ornaments with the gold supplied by the parties and according to the designs specified by the parties. The craft which must have flourished even before the advent of the French passed through a period of transformation adopting the alloyed gold and silver instead of pure metals for making ornaments.

The tools used by them are the clay crucible, iron blow pipe, anvil tongs, pincers, trays, steel [draw plates with several holes of different sizes to draw wires, besides various types of small chisels and engravers.

Many of the goldsmiths have migrated to the nearby towns where they are nowadays employed by jewellers for making gold ornaments and silver articles.⁹⁶

Perfumeries : The origin of the perfumery industry in Pondicherry may be ascribed to French influence. Its simple existence is an evidence of the presence of the French who enjoyed world-wide reputation for their Parisian perfume-makers of a luxurious product of national speciality.⁹⁷

There are two units in Pondicherry producing such deodorants as **Eau de Cologne** and such varieties of perfumes as Lavender, Jasmine, Chypre, etc.

Chemicals are obtained through imports from France and Holland. Alcohol is obtained locally. **Eau de Cologne** is the most popular item among deodorants. The products are bottled in one, two, four and ten-ounce bottles. Sale of products is not a problem for the units.

Wood-carving : It can be said without doubt that this craft must have flourished in the region for more than two centuries. Anyone who visits the house of Anandarangapillai at No. 69, Rangapillai street, Pondicherry, built in the Indian style with a courtyard and interior verandahs can have an idea of the pattern of wood-carving of this epoch. There, one can admire the beauty of the pillars carved in wood. Specimens of exquisitely carved door frames can still be seen in some of the ancient mansions in the Territory.

With the arrival of the French, the traditional art acquired a new dimension of western orientation. This fusion, according to Labernadie, "added to the robustness of the material, a touch of grace which reflected the style of Louis XV in its finest shape".⁹⁸ Individual artisans still carry on the craft thanks to the patronage they enjoy of a few foreign and Indian connoisseurs of art. The wood-working unit of Sri Aurobindo Ashram engages a few workmen who make small carvings of animals, images of gods and goddesses, besides items of carved furniture.

Cutting and polishing of precious stones : A couple of units were started recently which were engaged in the cutting and polishing of artificial stones for ornamental purposes. These units catered mainly to the requirements of local jewellers. However, both the units found the going hard and closed down subsequently.

Agarbathis : Agarbathis are made by a unit attached to Sri Aurobindo Ashram. Although it is not a traditional craft, it has a traditional value and is being carried on as a cottage industry. All the raw materials viz. sweet smelling herbs and bamboo sticks are obtained from Mysore. Besides meeting the requirements of the Ashram, the unit sends its products to Bombay and Madras. Its products are exported to foreign markets as well.

Khadi and Village Industries Commission :

Following merger, the All India Khadi and Village Industries Commission evinced interest to extend its sphere of activity to the Union Territory of Pondicherry. It was, however, considered unnecessary to set up a separate Khadi Board for the Union territory to implement the programmes of the Khadi Commission. Instead it was found more feasible to implement the schemes in the Territory through the Directorate of Industries. This was so arranged because the Territory was small and the institutions eligible for assistance from the Khadi and Village Industries Commission were too few. In 1958 the Directorate of Industries, in consultation with the Khadi and Village Industries Commission, prepared some schemes for bee-keeping, oil extraction, mat weaving, toy making and for the manufacture of palm jaggery and palmyra leaf products.

A training programme in Ambar Charkas was introduced in Mahe with the help of the Commission in 1959. A loan of Rs. 22,000 was given by the Commission to the Mahe Nirmana Pravarthi Samithi for providing Ambar Charka training.⁹⁹

The Directorate of Industries also extended necessary assistance to start a handmade paper factory in Pondicherry.¹⁰⁰ The handmade paper unit started production in December 1959. The Karaikal Handmade Paper Industrial Co-operative Society, the Nayinarmantapam Hand Pounding Rice Workers Industrial Co-operative Society (Pondicherry), the Pandacholanallur Carpentry and Blacksmithy Industrial Co-operative Society (Pondicherry), the Ganapathy Oil Makers Industrial Co-operative Society and the Pondy Palm-gur Industrial Co-operative Society received financial assistance towards working capital, cost of machinery and equipment and for the construction of factory building, etc. Yet none of the societies functioned successfully. Non-functioning societies were liquidated.

In the year 1968 the Pondicherry Khadi and Village Industries Association was formed and registered on 18 November 1968 under the Societies Registration Act with a view to revamping the Khadi and Village Industries movement in the Territory. The Managing Committee of the Association consisted of the Secretary, Development Department and the Director of Industries (ex-officio members), besides five non-officials who

functioned as Executive Committee members. The Association was to function under the patronage of the Lieutenant-Governor. Assistance amounting to Rs. 3,13,000 was assured for the development of a tannery unit, a lime kiln, a brick plant, a glazed pottery and mangalore tile unit and also for hand pounding of paddy in this Territory. The proposed brick manufacturing project and the lime kiln project were soon abandoned as not feasible.

An Ambar Charka Unit with 25 textool model Ambar Charkas and other preparatory machines was started in Pondicherry and placed under the management of the Tamil Nadu Sarvodaya Sangh on 23 April 1969. About 30 women were initially employed. An Ambar Charka unit (25 charkas with accessories) was sold to the Pondicherry Central Jail where training was given to the prisoners.

Financial assistance in the form of grants (Rs. 2,800), loans (Rs. 4,400) and working capital (Rs. 60,000) was extended to the Pondicherry Khadi and Village Industries Association by the Khadi and Village Industries Commission.

A hand pounding unit was started on 23 April 1969 which was later shifted to the Industrial Estate. It was also decided to allot a plot (3,000 sq. ft.) for the unit within the estate campus. The unit, however, did not fare well. A plot belonging to the Public Works Department in Nonanguppam was selected for the tannery unit. This project too did not register further progress. Hence the Executive Committee of the Pondicherry Khadi and Village Industries Association which held its meeting on 15 June 1970 decided to implement the schemes with the help of private individuals or co-operatives. Even this decision was not found enough to implement the projects.

To sum up, the Pondicherry Khadi and Village Industries Association did not achieve much success in implementing the Khadi and Village Industries Schemes in the Territory. At the beginning of 1971 all that remained was a sum of Rs. 68,696.52 of the Association in the Pondicherry Co-operative Urban Bank.* On 2 August 1971 the Executive Committee decided to refund the unspent portion of the loan and grant to the Khadi Commission.

* Based on a note on the working of the Pondicherry Khadi and Village Industries Association (Mss.) of the Directorate of Industries.

Bee-keeping : The Gandhi Niketan Ashram, Kallupatti, Tamil Nadu, with the financial and technical assistance offered by the Khadi and Village Industries Commission gave a start to bee-keeping in the Territory in 1963. An Area Office in Pondicherry and five sub-stations were opened in the year 1968.

The table below gives a picture of the 10-year progress of bee-keeping industry in the Territory :

Year			No. of villages covered	No. of bee colonies at the end of the year	Quantity of honey collected
(1)			(2)	(3)	(4)
					In kg.
1963-64	..	..	26	88	14
1964-65	..	..	24	312	177
1965-66	..	..	58	655	533
1966-67	..	..	75	810	1,562
1967-68	..	..	75	773	2,101
1968-69	..	..	78	745	2,191
1969-70	..	..	79	1,060	2,530
1970-71	..	..	105	1,237	2,715
1971-72	..	..	106	1,393	4,151

During 1970-71, 20 bee-keepers in the Territory were given one month's intensive training in bee-keeping at the Area Office, Pondicherry. All the bee-keepers receive practical training from the fieldmen during their routine visit. The Territory with its rich flora and the abundant number of bee colonies combined with its moderate climate is said to offer great scope for the expansion of bee-keeping industry. According to one estimate, over 5,000 colonies can profitably be set up in the Territory with a capacity to extract 25,000 kg. of honey per annum.

IV. Industrial potentialities and plans for future development

A systematic survey of the industrial potentialities of the Territory was carried out for the first time in 1958 by the Small Industries Service Institute, Madras, at the request of the Pondicherry Administration. The findings of the survey were submitted in the form of a report to the Government on 10 March 1959, i.e., at the fag end of the third year of the Second Five Year Plan.

The analysis of resources, markets and the industrial climate showed that there were good prospects for light engineering, brick making industries and moderately good prospects for soap, radio components, domestic utensils, coir products, mat weaving and wood based industries in the Territory.

The survey revealed that Pondicherry had many important locational advantages for industrialisation and referred to the availability of capital and a network of good marketing channels extending throughout the country. The survey, however, pointed out the need to simplify the procedural formalities governing the regulation of new industries and to declare certain localities as 'industrial areas' where industries could be started without much procedural formalities. The need to pass legislation for providing financial assistance to industries was also emphasised. 101

According to the survey new industries which offered scope were :

1. Cycles, cycle parts and accessories.
2. Agricultural implements.
3. Electrical accessories.
4. Electric motors and
5. Starch and sago manufacture.

In 1964 the National Council for Applied Economic Research was requested to conduct a comprehensive techno-economic survey of the Territory to identify all the resources available for economic development of the Territory.

In the normal course its recommendations should have guided the formulation of the Fourth Plan schemes under the various sectors. But in the context of the three Annual Plans covering the period from 1966 to 1969 the adoption of the recommendation of the survey and their application was limited to the scope of Annual Plans.

At the request of the Administration, a survey to study the scope for setting up salt and salt based industries in the Territory was conducted in December 1971 by the Salt Department, Government of India. All the four regions were inspected and areas suitable for salt cultivation were identified. The report which was submitted in January 1972, discussed the economic feasibility of recovery of marine chemicals like magnesium chloride, basic magnesium carbonate, potassium chloride and boromine from bitterns and explained various schemes for the production of such chemicals in the Territory. The survey drew pointed attention to the natural advantages of Yanam for the development of salt industry.¹⁰²

In September 1971 the entire Union Territory was declared as an industrially backward area. As a corollary to it, new industries became eligible for further incentives. This opened up better prospects for further industrialisation of the Territory. The Development Commissioner for Small Industries also suggested the need for a fresh survey of the industrial potentialities of the Territory. Accordingly a survey was conducted by the Small Industries Survey Institute, Madras, in the year 1972. The findings of the survey were expected to determine the scope and establishment of industries in the Territory during the Fifth Plan period.

Yet another survey of the Territory was sponsored jointly by the Industrial Development Bank of India, the Industrial Credit and Investment Corporation of India, the Reserve Bank of India and the Agricultural Finance Corporation to identify the Territory's industrial potential and to indicate projects which could possibly be undertaken so as to facilitate the formulation of specific industrial projects for assistance by the financial institutions. The survey pointed out that institutional assistance to industries in the Territory was very insignificant. The survey team, therefore, felt that such assistance could be stepped up only by identifying viable projects.

According to the survey, the economy of the Territory can be given a boost only by the establishment of some new industries. In the words of the team, "these are a cement plant, a paper mill, alcohol based chemical and pharmaceutical industries, oil extraction (from fish), plants and ancillary industries to the large-scale industries within the Territory as well as in the neighbouring states." The team also felt that there was room for expanding the existing cotton textiles and sugar industries and the Government distillery. According to the team's report, tourist traffic to Pondicherry can be increased by the establishment of an airport at Pondicherry and the construction of first class hotels. 'Declaration of Pondicherry port as a free port area', the team said, 'will greatly increase the economic activity in this area.'¹⁰³

Although the Territory has no major impediments to pass through to reach a break-through in industrialisation, an awareness of the handicaps will add to the present study for a better understanding of the realities facing the economy.

The Territory is provided with few resources capable of exploitation for industrial purposes. Most of the raw materials required for running the industries have to come from outside the Territory. Hence the question of procurement of scarce raw material and their equitable distribution commensurate with the capacity for utilisation assumes great importance.

The small size of the population with a limited working force does not provide the necessary manpower required for large-scale industrial development unless technological alternatives are worked out. The Territory does not also generate power to meet its requirements. In fact its entire requirements are met from the neighbouring states. Another pertinent fact is that industries in small territories will grow or decline in the measure in which they are able to market the products outside the Territory. This has to be viewed in the context of the hurdles that lie in inter-state movement and sales of goods and the divergent taxation policies pursued by the states.

This study of the industrial potentialities of the Territory is based on :

1. Agricultural resources,
2. Marine resources,
3. Livestock resources,
4. Mineral resources,
5. The demand for products,
6. The availability of cotton waste and
7. The requirements of public sector projects.

Potential for agro-based industries :

Agriculture is the most important economic activity in the Territory, although agricultural production alone is not so abundant as to induce a very high standard of industrial development. Rice, oil-seeds, sugar-cane and coconuts are the important agricultural products of the Territory.

Rice milling : The production of rice was expected to cross 60,000 tonnes by 1975-76. The 1965 survey found that except for a small quantity exported outside the Territory in husk, the entire production of paddy was milled within the Territory and pointed out that there was sufficient justification for setting up two modern rice mills, one in Pondicherry and another in Karaikal, each with an installed capacity to dehusk annually 20,000 tonnes of paddy.¹⁰⁴

Oil milling : Oil-seeds production was expected to double by 1975-76.* In 1961 there were seven oil mills (registered) and 60 oil *ghanis* located mostly in Pondicherry. Oil milling capacity was expected to reach 7,000 tonnes before 1975-76 providing further scope for the expansion of oil milling industry in the Territory.¹⁰⁵

Solvent extraction of oil-cake and rice bran : The availability of oil-cakes and rice bran from the oil and rice mills provide scope for solvent extraction of additional quantities of oil. A plant with a daily capacity to process 25 tonnes of oil-cake and rice bran is said to be feasible for the Territory.¹⁰⁶

Activated carbon and dessicated coconuts : Coconut shells could be utilised for the manufacture of activated carbon and the kernels for producing dessicated coconuts in the Territory.¹⁰⁷

Coir and coir products : The 1965 survey indicated that with increased availability of coconut husks the coir processing industry can be expanded both in Pondicherry and Karaikal.¹⁰⁸

* During 1961-62, the estimated production stood at 4,447 tonnes of ground-nut and 254 tonnes of gingili.

Sugar : The only sugar mill in the Territory had a daily crushing capacity of 800 to 1,000 tonnes of sugar-cane in 1963-64*. The performance of the mill during 1960-64 is given below :—

	1960-61	1961-62	1962-63	1963-64
Cane crushed (in tonnes)	2,73,000	1,14,000	1,12,000	1,99,000
Sugar production (in tonnes)	19,572	10,269	9,744	5,462
Sugar recovery (in percentage)	7.19	8.98	8.66	7.66
Duration of the crushing season (in days)	304	164	128	218

In 1972 the crushing capacity was 1,500 tonnes per day on a single shift basis. The annual production of sugar-cane was expected to reach 4,00,000 tonnes by 1975-76. The 1965 survey pointed out that the increase in sugar-cane production should provide scope for increasing the daily crushing capacity of the existing mill from 1,500 tonnes to 2,000 tonnes.¹⁰⁹ In the alternative the setting up of another sugar mill in the Territory could also be considered.** This in turn would provide scope for developing a sugar complex in the Territory.

Sugar-cane wax : About 6,000 tonnes of filter press mud which is available in the form of waste is sold to farmers as manure. There is scope for the manufacture of sugar-cane wax through solvent extraction of the press mud.

Mineral wool : The 1972 survey also pointed out that the residue from solvent extraction when suitably blended with clay and sand, can be used in the manufacture of mineral wool useful for hot and cold insulation. The report, however, called for ensuring the market for the products before developing the industry.¹¹⁰

* There were also a few sugar-cane crushers, both power and bullock driven. Of the 14 crushers in 1961 three were power-driven crushers.

** The setting up of a sugar mill in the co-operative sector in the Territory was under active consideration.

Ethyl alcohol : Molasses is the chief by-product obtained in the manufacture of sugar. The available molasses-about 8,000 tonnes per annum-from the New Horizon Sugar Mill is consumed by the Government distillery at Pondicherry. Molasses contains a good percentage of sugar which can be converted into other desired ethyl alcohol products by fermentation.

Paper : In the absence of any kind of forest resources, bagasse and waste paper are considered good enough for starting a paper factory in the Territory. A licence was also issued for a paper factory with an annual capacity of 7,500 tonnes. The factory did not, however, come through. The Techno-Economic Survey also recommended the setting up of a paper plant with an annual capacity of 18,000 tonnes on the basis of its assessment that about 1,20,000 tonnes of bagasse would be available. This was subsequently found impractical. The entire quantity of bagasse is used as fuel by the sugar factory itself as the boilers of the mill are so designed that the unit cannot use furnace oil instead. The Industrial Potential Survey (1972) pointed out that there was little scope for the utilisation of bagasse for the manufacture of paper or strawboards in the Territory. 111

Strawboard : In all about 50,000 tonnes of paddy straw are said to be available in the Territory for industrial utilisation. The annual demand for strawboard in the Union Territory of Pondicherry and Tamil Nadu being placed at about 6,000 tonnes and production in the two Tamil Nadu units being inadequate to meet the requirements, the 1972 survey found that there was scope for an additional unit which could be set up in the Territory. It was considered feasible either to assist the existing unit in Karaikal to commence production or to set up a new mechanised unit in the Territory. 112

Processing of ragi malt food : Ragi is the second important food crop of the Territory with an annual yield of about 5,000 tonnes. The 1972 survey indicated that as weaker sections of the community switch over to the consumption of rice, ragi would increasingly become available for the manufacture of ragi malt food. This, according to the survey, would facilitate the setting up of a unit with a production capacity of 500 kg. per day in the Territory. 113.

Balanced poultry feed : With the implementation of the plan schemes for poultry development in the Territory, the demand for poultry feed is bound to increase. It would then be feasible to start one unit for the manufacture of balanced and synthetic poultry feed as most of the ingredients for this item viz, bran, ground-nut cake, molasses, limestone, etc., are available locally. 114

Starch and sago : Ariyankuppam and Bahur are considered suitable for setting up starch and sago manufacturing units as tapioca can be grown in those areas.

Marine based industries :

Fisheries are relatively well developed in the Territory. Nevertheless, the 1972 survey pointed out that a comprehensive survey of the potentialities of deep sea-fishing has not been conducted and emphasised the need for conducting such a survey in the Territory.¹¹⁵

A substantial portion of the fish caught in the Territory (9093 tonnes valued at Rs. 182.00 lakhs) is at present consumed locally and the rest is sent to Tamil Nadu and Kerala. The de-shelled shrimps are iced and transported to Madras and Cochin for processing to be eventually exported to foreign countries.

There is said to be good scope for freezing and canning of fish in the Territory itself, provided berthing and landing facilities are improved in all the regions.

Freezing and canning of fish and prawns : Important varieties of fish suitable for freezing and canning like sardines, pomfrets, mackerels, seer fish, tunnies and prawns are available in large quantities with great potential for commercial exploitation. According to the 1972 survey at least a few units for freezing and canning of fish and prawns can be set up in the Territory.

Fish meal : Fish wastes made available from the processing industries would in turn offer scope for the production of fish meal to be used as organic manure. The 1972 survey indicated that this unit could preferably be located near the fish canning and freezing unit if it should materialise.¹¹⁶

Chanks : The lease of right of Pondicherry chank fisheries bring an annual income of about Rs. 19,000 approximately and that of Karaikal Rs. 10,000. The chanks are sold to merchants who take them to Ramanathapuram District for further processing and disposal.

The chanks in Pondicherry and Karaikal are also utilised for making shell grips, bangles, rings, decorative table lamps, etc. There is scope for starting a unit in the Territory for manufacturing such articles for which there is a good market.¹¹⁷

Mattee : There are two mattee shell fisheries , one at Uppanar and the other at Chunnambu Ar. The mattee shell fishery of Chunnambu Ar was auctioned for Rs. 8,951 per annum for three years (1968-1970). The mattee shell fishery of Uppanar was not auctioned during the year 1969-70 due to the poor fishery on account of water pollution caused by drought.¹¹⁸

Salt : The survey conducted by the Salt Department, Government of India, in 1971, identified three sites in Pondicherry region, six sites in Karaikal region and two composite sites in Yanam for the development of salt industry in the Territory. The details of the sites are given below :

			Area		Production capacity	
			H.	A.	C.	(in tonnes)
Pondicherry						
1.	Olandai (Pondicherry Commune)	.. ..	20	40	50	2,000
2.	Nallavadu (Ariankuppam Commune)	.. ..	28	36	62	1,750
3.	Uchchimedu (Bahur Commune)	.. ..	18	68	40	1,250
Karaikal						
1.	Oduturai (Niravi Commune)	.. ..	47	08	24	3,000
2.	Akkaravattam (Niravi Commune)	.. ..	44	34	49	2,800
3.	Vanjiyur East (T.R. Pattinam Commune)	.. ..	14	88	57	1,000
4.	Vanjiyur West (T.R. Pattinam Commune)	.. ..	32	02	67	2,200
5.	Keezhavely (Karaikal Commune)	.. ..	23	10	00	1,500
6.	Ammankovilpathu (Karaikal Commune)	.. ..	24	97	60	1,500

Yanam	Area			Production capacity (in tonnes)
	H.	A.	C.	
1. Isukatippa islands No. 1	213 50 00
No. 2	143 50 00
No. 3	42 70 00
No. 4	6 22 00
No. 5	32 48 00
Total	438 40 00
2. Adivipolam	..	150	00 00	35,000 (approx.)

According to this survey, salt production can be increased in the Union Territory from the present 200 tonnes to 60,000 tonnes by 1976.¹¹⁹

The report, however, called for the industry's inclusion in the list of recognised industries eligible for financial assistance and recommended that the lands should be leased out at least for a minimum period of 20 years. The survey further stressed the need for connecting the sites with good roads and to ensure prompt supply of power.¹²⁰

Industries based on livestock resources:

The livestock population of the Territory as revealed by the Livestock Census 1966 was 1,23,440 of which 78,227 were found in Pondicherry region, 40,303 in Karaikal region, 2,491 in Mahe region and 2,419 in Yanam region.¹²¹ The number of poultry as per the same census was 1,07,139 of which 60,969 were found in Pondicherry region, 37,173 in Karaikal region, 4,241 in Mahe region and 4,756 in Yanam region.

Tannery : About 10,000 hides and 20,000 skins are available per annum from the slaughtered and fallen animals. They are being taken to the neighbouring state of Tamil Nadu for processing. There is said to be enough scope for setting up a small tannery for utilising the available hides and skins. Livestock products like milk, milk products and meat are locally consumed.

Poultry dressing plant/egg powder : According to the 1972 survey the total poultry population in and around Pondicherry region was placed at about 10,000 improved birds. As marketing facilities for the culled birds posed a problem, the survey suggested that it would be feasible to set up a poultry dressing plant in Pondicherry with a capacity of 30 birds per day. With the various schemes envisaged for the development of poultry and the production of eggs, the survey pointed out that there was also scope for setting up a unit for the manufacture of egg powder in the Territory.¹²²

Mineral based industries:

According to the Techno-Economic Survey of 1965, the limestone deposits were the only mineral reserves "based on which industrial development can be envisaged" in the Territory in the near future.¹²³ (For details of reserves, etc. vide Chapter—I under 'Mineral Wealth').

Lime burning : Lime burning is carried out on a limited scale in the Territory for meeting the requirements of house construction and white washing. The sugar manufacturing process also involves the use of lime for the clarification of cane juice. It is also used in the manufacture of paper for recausticizing the cooking liquor with a view to recovering and reusing the process chemicals. The Techno-Economic Survey pointed out that, in view of its varied use, there was scope for a plant with a lime burning capacity of about 50 tonnes of limestone per day.

The Industrial Potential Survey (1972) stated that the limestone available was sufficient to sustain a small cement factory in the Territory. As it is, the low grade limestone is not suitable for the manufacture of cement. It can, however, be used for the manufacture of lime through modern kilns.¹²⁴

Precipitated calcium carbonate : Limestone is also used for the manufacture of items like precipitated calcium carbonate which finds use in rubber industry especially in the manufacture of tyres. It is also used as filler in paints, crayons, pencils, creams, etc. According to the Industrial Potential Survey of 1972, there was scope for the manufacture of this item in the Territory as there was no such unit even in Tamil Nadu.¹²⁵

Brick making : The availability of good quality clay had given rise to brick making industry in the Territory. According to the Techno- Economic Survey of 1965, there were about 30 brick kiln owners in the Territory producing annually about 150 lakh bricks. With further increase in demand, the survey indicated, there was scope for two modern brick kilns each with an annual capacity of 50 lakh bricks.

Industries based on demand:

In view of the small size of the Territory, its market for industrial products is limited. In order, however, to accelerate the process of industrialisation, the Territory has necessarily to take into account the demand for products in the neighbouring states as well as in the country.

The Industrial Potential Survey of 1972 identified some of the industries that could be established in the Territory purely on the strength of the prevailing demand for the products.

Insecticide and pesticide formulations : According to the survey, there was good scope for a unit to undertake the manufacture of insecticide and pesticide formulations like D.D.T., B.M.C. and Entrin in the Territory.

Mechanised fishing boats : The long stretch of coast-line and the availability of commercially important species of fish and the schemes envisaged under the plans for the growth of fisheries in the Territory are said to offer scope for setting up one unit for the manufacture of mechanised fishing boats in the Territory.

Nylon fishing nets : With the gradual mechanisation of the fishing industry and the increasing use of nylon yarn, the demand for nylon fishing net was bound to increase. This, the survey pointed out, may justify the setting up, of a unit for the manufacture of nylon fishing nets in the co-operative sector.

Monofilament from high density polyethylene : The yawning gap between demand (450 tonnes) for monofilaments and its actual production (280 tonnes) in the country is said to offer scope for setting up one such unit in the Territory.¹²⁶

Sodium bichromate : The annual consumption of bichromate by the textile mills in Pondicherry is placed roughly at 700 tonnes. The 1972 survey pointed out that the entire requirement was then procured from other states. Hence there was good scope for establishing one unit to take up the manufacture of sodium bichromate in the Territory.¹²⁷

Sodium sulphide : According to the same survey, there were encouraging prospects for a unit to take up the production of sodium sulphide in the Territory, particularly so because 240 tonnes of sodium sulphide would become available from the sodium bichromate unit once it started production.

Corrugated paper and board : The requirement for corrugated paper and board by the local pharmaceutical industry and the gap between demand and supply at the national level is said to underscore the need for setting up such a unit in the Territory.

Absorbent cotton : The local demand for absorbent cotton, known otherwise as surgical cotton wool, is roughly placed at 60,000 kg. per annum. In the absence of any unit manufacturing this item in the Territory and its requirements being met entirely from outside the Territory, there is scope for one unit for the manufacture of absorbent cotton.

The easy availability of staple Indian cotton and other raw materials such as caustic soda, bleaching agents, sulphuric acid, etc. favours the establishment of such a unit in the Territory.

Surgical bandages : The total value of surgical bandages required for the hospitals in the Territory, now largely met from outside sources, is placed roughly at Rs. 2 to 2.50 lakhs per annum. On the basis of the prevailing demand, there is adequate scope for setting up one such unit in the Territory.¹²⁸

The Industrial Potential Survey also suggested that it would be feasible to set up units for the manufacture of builders hardware, black insulating adhesive tapes, bicycle tyres and tubes, rigid P.V.C. pipes, etc. in the Territory.

Electronic and electrical industries : Viewed against the background of the fantastic growth of the electronic industry in the world and the growing demand for electronic items in the country, there is vast scope for further development of the electronic industry in Pondicherry. Already a wide range

of electrical and electronic items like chokes, small transformers, handswitches, battery chargers, rectifiers, induction motors, emergency lights, etc. are being manufactured in the Territory. Proposals are also underway for the manufacture of such items as time switches, volt meters, miniature electric motors, etc. With the present level of skill and the anticipated flow of skilled personnel from the technical institutions, it is considered feasible to undertake the manufacture of carbon resistors, loudspeakers, electrolytic condensers, polystyrene condensers, aluminum capacitors, etc. in the Territory. According to the Industrial Potential Survey of 1972, the manufacture of heating, cooling and motorised appliances is another prospective line of enterprise. The survey also considered feasible the setting up of a Functional Industrial Estate exclusively for electronic and electrical items in the Territory. (For more details about the proposed 'Functional Industrial Estate' vide page 587).

Industry based on cotton waste :

It is roughly estimated that in the five mills in the Territory about 350 tonnes of cotton go waste while processing. A small unit which exists at present in Pondicherry collects a portion of such waste cotton from the textile mills to be sent to Madras after processing. The remaining cotton waste is sold by the mills directly.

Low count yarn : The low count yarn that can be manufactured by blending cotton waste with raw cotton is in great demand for the manufacture of blankets and carpets. There is, therefore, scope for setting up a unit for the manufacture of low count yarn in the Territory. 129

The Techno-Economic Survey also indicated that the handmade paper unit which at present manufactures good quality drawing and artists papers could expand production. Manufacture of cement blocks, flooring tiles and pre-fabricated concrete structures are some of the lines which offer better prospects for development.¹³⁰ There is scope for further expansion of the production of soaps, paints, varnishes, handmade paper, cement blocks, flooring tiles and pre-fabricated concrete structures in the Territory.

The products of the engineering industry in the Territory are either durable consumer goods or intermediate products. Hence it is difficult to assess the scope for developing the engineering industries in the Territory.

The survey, however, pointed out that some specialised industries such as the manufacture of machinery for chemical, pharmaceutical, printing and cement industries, besides ball and roller bearings, air compressors, machine tools, electric motors and instruments can be developed in the Territory with a view to catering to the regional demand.¹³¹

The requirements of public sector projects :

The 1972 survey also studied the stores and by-product requirements of some important public sector projects to evaluate the feasibility of starting new small-scale units in the Territory. The report spelled out the various items required by the Neyveli Lignite Corporation Ltd. The study also showed that there was scope for the manufacture of polythene woven sacks in the Territory.¹³²

According to the same report, some other units could also be set up in the Territory even though the required raw materials were not available within the area. Once the Neyveli complex undertakes the manufacture of lignite briquettes, phenol will be one of the important by-products which will be available for industrial use. Technical grade urea will be available for use in chemical processing industries. Should the petro-chemical complex recommended by the Working Group of the Planning Commission take shape, the resultant methanol may facilitate the manufacture of formaldehyde in the region. The availability of all the raw materials in the region will enable the manufacture of P.F. and U.F. moulding powders used in the manufacture of a variety of electrical and other industrial products.

At present moulding powders are not made in the region. It is possible to consider setting up a unit for the manufacture of 2,000 tonnes of moulding powders annually.

Another important line along which industrial development in the Territory can proceed is the manufacture of components for various industrial products required not only for units in Pondicherry but also for projects like the Heavy Boiler Plant, Tiruchchirapalli.

Some of the industrial activities of the Territory are connected directly or indirectly with Sri Aurobindo Ashram which has as its adherents men and women with specialised skills. The industrial activities of the Ashram which were initially organised to utilise the skill of its inmates and to meet the requirements of the Ashram have grown into industrial enterprises.¹³³ The scope for utilising the talent available in the Ashram for the industrial development of the Territory was also stressed by the survey.

The Techno-Economic Survey of 1965 made a ten-year perspective study and recommended programmes for implementation during 1966-76 requiring a total investment of Rs. 35.29 crores. An analysis of the pattern of investment showed that the largest portion of the total investment (74 per cent) was allocated for industries. A part of this investment provided for the expansion of sugar and textile industries and for new capacities in agro industries.¹³⁴

The National Council for Applied Economic Research estimated that the total investment required for implementing the various programmes and recommendations outlined in its report at Rs. 3,529 lakhs for the decade 1966-76. But it must be noted that the years 1966-69 turned out to be the period of Annual Plans. The Territory's plan outlay on industrial schemes stood at Rs. 49.124 lakhs for the Fourth Plan. At the end of the Fourth Plan, the Territory's industrial sector stood as if poised for another forward leap into the future.

For details about 'Labour Welfare' see Chapter—XVIII. Other Social Services.

V. Power

Pondicherry:

The first decade of this century witnessed the advent of electricity in Pondicherry. The Municipality in Pondicherry was authorised by the *arrêté* of 6 June 1908 to raise a loan of Rs. 64,000 from the *Caisse de Secours Mutuels des Macouas* so as to enable it to take steps to provide electricity to the town.¹³⁵ The 524 KW—D.C. power house set up by the municipality went into operation in the year 1909. Provided with diesel motors, it produced an uninterrupted current at 220 V and the town received its supply from 14 July 1909. The D.C. power produced by this unit was sufficient

for lighting the Governor's residence, some offices and a few houses in rue Dumas and rue Capucin. It is likely that the municipality had some difficulty to run the unit, for in 1920 a subvention of Rs. 2,000 is understood to have been granted to the Municipality to run the undertaking. However, in 1929 the responsibility for running the unit came to vest with the **Service de Travaux Publics**.¹³⁶ The very next year a decree was passed to regulate the system of power distribution in the town. In spite of all efforts, the undertaking did not prove very successful. Moreover, the electricity produced was hardly sufficient to meet the requirements of the whole town and the three mills. In 1941 this unit was replaced with two diesel generating sets of 375 KVA each. The power from this station was initially extended to the southern part of Pondicherry town and later to the entire town.

Following World War II, railway traffic was completely dislocated. Moreover, with the appearance of the Japanese fleet, the import of coal to Pondicherry was disrupted affecting the working of the mills. For want of coal, one mill was constrained to close down for two months. The shortage of mazout affected the irrigation works. All these brought the Territory towards the brink of an economic crisis which led to some rethinking on the part of the Administration as to the course to be adopted to meet the power famine. On 29 May 1942 the Administration sent a note to the British Government explaining the then prevailing situation in the region for their consideration. In September 1942, Colonel Platts, Chief of Electricity Department of the Madras Presidency paid a visit to Pondicherry to study the situation. After visiting the three textile mills and the municipal power house, he came to the conclusion that Pondicherry's power requirements would be more than what had been asked for and recommended the installation of a high tension line for the supply of power from British India. Under a 10-year agreement the British Government agreed to supply power of a total quantity of at least 500 KW with scope for increasing it later. The line was to be brought upto the border on the right bank of river Gingee.¹³⁷ The supply effected on 2 January 1944 was availed from a supply point at Tiruvandarkovil.¹³⁸ The power was brought by a 22 KV feeder from the Sub-station at Villupuram, although there was scope in the agreement for increasing it to 66 KV.

In 1945, the colony was authorised to build its own network and to ensure the supply of high tension power to the textile mills in the town and the pumping station and low tension power for agricultural purposes. At the same time, the running of the undertaking was entrusted to a Board of Management which consisted of four members, besides the Director of

Public Works who became its permanent member. The Board met at least once a month and was empowered to frame rules for the internal administration of the undertaking, recruitment of staff, execution of major works, etc. The Director was required to prepare an annual statement of receipts and expenditure which was to be voted by the Board and approved by the Governor. The *Trésorier-payeur* looked after the accounts.

In 1946 the demand stood at 300 KW on D.C. and 1,800 KW on A.C. The demand further increased to 2,000 KVA (1,600 KW) by 1953. The 10-year agreement was due to expire on 31 December 1953. In the meanwhile, the Madras Government expressed its inability to continue supply after 1 January 1954. The French Administration had in the meanwhile started the construction of a thermal power station of 4,900 KW. in standard capacity (derated to 2,500 KW). The power station was commissioned in May 1951. The station consisted of three secondhand steam generating sets with oil fired boilers. The water for cooling the condensers was brought in from the sea through pipes.

The Madras Government further issued a directive to *Régie de l'Electricité* to dismantle its sub-transmission lines running across Madras State from one French enclave to another. However, as merger took place within a few months, the directive was not executed.

Soon after merger, electricity was restored to Pondicherry. The operation and maintenance of electrical installations in the establishments was facilitated by the extension of the Indian Electricity Act, 1910 and the Electricity (Supply) Act, 1948 with effect from 1 November 1954. But the main issue that cropped up soon after, related to the purchase of the power house as Article 22 of 1954 French-India agreement provided for the transfer of the power station to the Indian Government on payment. In 1955 the Administration was authorised by the Ministry of External Affaires to purchase the power house for Rs. 22.7 lakhs.¹³⁹ Since then all operations connected with the distribution of electricity in Pondicherry and Karaikal regions became part of the responsibility of the Administration. This led to the formation of the Directorate of Electricity by the *arrêté* of 23 July 1956. The total assets were valued at Rs. 39.30 lakhs as on 1 January 1954. Although the thermal station had an installed capacity of 2,500 KW, it actually produced only 1,200 KW due to the insufficient capacity of boilers used. It was hardly sufficient to meet

the growing demand for power in the region. Moreover, it was found that it would involve heavy capital expenditure to improve the power station to its full capacity of 5 MW. Hence arrangements were made to get the whole quantum of power required from the neighbouring state of Tamil Nadu.

Soon after merger which marked the penultimate year of the I Plan, more villages were electrified, more agricultural pump sets were energised and power supplied to more L.T. industries. Some parts of the town were till then fed by D.C. power. Hence the change over from DC to AC was also undertaken during this period. The demand for power rose from 1,600 KW in 1953 to 2,200 KW. by March 1956.

As part of the II Plan, the Government embarked on a programme of urban and rural electrification at a total cost of Rs. 53 lakhs. ¹⁴⁰ The supply of power which was effected through a 22 KV line from the Villupuram sub-station was not sufficient to cater to the additional load. Hence a scheme was drawn up for providing a 66 KV line from Villupuram to Pondicherry to feed a 66/22 KV sub-station at Villianur with a capacity of 10 MW. The sub-station at Villianur provided with two 5,000 KVA capacity power transformers was erected by the Government of Tamil Nadu and commissioned early in September 1957. ¹⁴¹

In 1961, the Government of India conveyed its decision to treat the set-up as a commercial undertaking within the meaning of article 59 of the Accounts Code, with effect from 1 April 1961, thus necessitating the preparation of proforma accounts. In fact the Electricity (Supply) Act, 1948 provides for the setting up of autonomous bodies to carry on the generation, supply and distribution of electricity in the country. However, on 25 March 1967 this Territory was granted exemption from the said provisions of the law. The exemption which was valid upto 31 March 1972 was further extended upto 31 March 1977 enabling the operations to be carried on departmentally.

Under the III Plan all the 267 census villages in Pondicherry region were electrified. Pondicherry region being at the tail-end of the supply lines from Tamil Nadu, the incoming voltage was very low as also the power factor. This effected the voltage regulation and also increased the maximum demand of the system. In order to set right this factor, the Government embarked on a scheme to erect suitable static condensers and voltage regulators and oil

circuit breakers for the feeders at an estimated cost of Rs. 7.00 lakhs under the III Plan.¹⁴² A second point of supply at Manamedu in Bahur was commissioned in March 1963. This point was fed by a 22 KV line from Panruti sub-station. Although the entire requirement of power was obtained from Tamil Nadu, the A.C. power house was retained as a stand by to meet emergencies of power shortage. However, in July 1963 the old power plant with an effective capacity of 1,000 KW was condemned and auctioned.¹⁴³

The power demand in Pondicherry region was estimated to reach 25,000 KVA by the end of the III Plan. As the capacity of the Villiyanur sub-station was found inadequate to cope up with the growing demand, a proposal to upgrade the 66/22 KV sub-station to 110 KV with a capacity of 30 MVA was included in the III Plan. The Government of Tamil Nadu also agreed to release an additional 10 MW by extending a 110 KV line from Neyveli to Panruti and thence to Pondicherry through a 22 KV line to meet the increasing power requirements of Pondicherry.¹⁴⁴ Accordingly, the construction of the 110 KV line from Panruti to Villiyanur and the construction of the 110/22 KV sub-station with three transformers of 10 MVA capacity was completed in November 1968.

An additional 22 KV feeder from Villiyanur sub-station to Pondicherry was laid and energised in February 1968. This arrangement minimised the interruption of power supply and ensured better voltage conditions in Pondicherry town.¹⁴⁵

Under the IV Plan the electrification of all the census villages (388) in the Territory was achieved much ahead of schedule. The Government then embarked on the implementation of a Master Plan to rationalise distribution both in urban and rural areas and to replace the overhead lines by underground cables in some parts of the town. The introduction of uniform tariff in Karaikal and Mahe and the introduction of spot billing system in Pondicherry town were the other improvements carried out during the period.

Pondicherry region being interspersed by Tamil Nadu territory, the 22 KV feeders starting from the supply point of 110/22 KV sub-station at Villiyanur have to pass through a long stretch of land thus, reducing the utility of feeders and the voltage. In order to improve the feeder utility

factor, reduce the purchase cost of power and obtain improved supply conditions, a proposal was included in the V Plan, to install an additional 110/22 KV sub-station in Pondicherry region with a common metering point for both the 110/22 KV sub-stations.¹⁴⁶

At the time of *de facto* merger, out of 176 villages in Pondicherry region as many as 42 had the benefit of electricity. Upto 31 March 1961, 96 more villages were electrified taking the total number of electrified villages in the region to 138. By 1966, 267 census villages in the region were extended the benefit of electricity. Under the Crash Plan launched in 1969 all the inhabited villages in the region were extended the benefit of electricity by March 1972, i.e., two years ahead of schedule.

Karaikal:

Karaikal town came to enjoy the benefit of electricity since 1935 following the agreement reached between one Gopalakrishna Iyer and the Karaikal Municipality on 6 March 1933. The power was supplied to Grand' Aldée in 1937 following an arrangement made by the Municipality with him on 21 November 1936. The Karaikal Electricity Supply Company came to be formed after the death of Gopalakrishna Iyer in 1940. An agreement was reached on 8 November 1941 with the company for the supply of hydro-electric power through a 11 KV line to the Akalanganni Water Works and for domestic consumption through a 3.3 KV line. The power was transmitted from Mettur through a 66 KV line to Tiruvarur station, from where it was brought through a 11 KV line to a pumping station and to the transformers located at Tittachcheri on the south-west border of Karaikal region. From there the power was transmitted through a 3.3 KV line to the transformers at Grand' Aldée (200 KV) and Karaikal (50 KV).¹⁴⁷ Although these agreements expired in 1958 and 1961 respectively, they were further extended upto November 1967.

Thus at the time of merger only two communes viz., Karaikal and T.R. Pattinam had the benefit of electricity. After merger, licences were issued to extend supply to the remaining four communes.¹⁴⁸ A loan of Rs. 2.00 lakhs was sanctioned to the company for extending supply to Niravi, Tirunallar and Ambagarattur.¹⁴⁹ The electrification work was completed during 1958-59.¹⁵⁰

The Karaikal Electric Supply Company was taken over by the Administration with effect from 1 December 1967 after paying the company Rs. 7.7 lakhs as compensation. This step helped to achieve rapid progress in the electrification of villages in Karaikal region.

In Karaikal the power was availed at three points of supply viz., Akalanganni, T.R. Pattinam and Ambagarattur from M/s. SMESC, Tiruchchirappalli till 15 May 1968. This concern was taken over by the Tamil Nadu Electricity Board after 15 May 1968. Since then power was availed directly from the Tamil Nadu Electricity Board. As these points of supply were located at considerable distance from each other, there were many complaints from the power consuming public regarding poor voltage condition. Hence the three points of supply were replaced by a 66/11 KV sub-station at Velangudi which was commissioned on 12 October 1969. A second point of supply was commissioned at Vanjiyur (fed off Nagappattinam sub-station) on 22 February 1970.¹⁵¹ But Velangudi and Vanjiyur being far off from Karaikal required lengthy 11 KV feeders. Moreover, the distance was responsible for reduced voltage conditions at the tail-end of the feeders. Considering this factor and the economical aspects and with a view to ensuring better supply conditions, a proposal was included in the V Plan to instal a 66/11 KV. sub-station in Karaikal region. ¹⁵²

Upto 1966, only 31 out of 118 census villages in the region were electrified.¹⁵³ Eight more villages were electrified upto the end of 31 March 1969.¹⁵⁴ By the end of March 1971, 56 per cent of the villages were electrified. The remaining 50 villages were electrified by 31 March 1972 under the Crash Programme launched in 1969.¹⁵⁵

Mahe :

In Mahe, the West Coast Electric Supply Co. Ltd. was issued a licence in 1955 to organise the supply and distribution of electricity in the region. The company obtained power from the Kerala State Electricity Board and distributed it in the region.¹⁵⁶ On 1 October 1968 the undertaking was paid a compensation of Rs. 2,67,705 and taken over by the Administration. Since then all matters connected with the supply and distribution of power in the region is attended to departmentally.

The power requirements of Mahe are now met by the Kerala State Electricity Board at two points of supply viz. Pallur and Mahe. The sub-station commissioned by the Kerala State Electricity Board at Badagara helps not only to meet the growing demand for power in the region but also to eliminate the low voltage conditions and frequent interruptions in the area. ¹⁵⁷

As on March 31, 1961 there were only 233 connections in the region. There were besides, three industrial services and 235 street lights.¹⁵⁸ The take-over of the Electricity Undertaking in 1968 paved the way for rapid electrification of villages and settlements inhabited by the weaker section of the population in the region. All the villages were electrified by 31 March 1970.¹⁵⁹ The scheme for electrifying a portion of Chalakkara and Cherukallai areas was completed by 2 October 1970. This included extension of supply to areas adjoining Pandakkal, Pallur, Chalakkara, Chembra and Pallur Vayal.¹⁶⁰

Yanam :

The region first received the benefit of electricity in 1956. Since then the supply and distribution of electricity in the region was looked after by the Andhra Pradesh State Electricity Board which had an office in Yanam to attend to the works.¹⁶¹ The distribution of power was taken over by this Administration with effect from 7 June 1976.

Prospects and potentialities :

The per capita consumption of power rose from 18 units in 1954 to 95 units in 1961 on the basis of the 1961 census. This rate was higher than that prevailing in the adjoining states. The per capita consumption which stood at 148 units in 1966 increased to 232 units in 1974-75. The per capita consumption of 232 units is the highest among the states.

In 1965 the National Council for Applied Economic Research indicated the tentative future demand for power in all the four regions as follows :¹⁶²

(In MW)

			Pondicherry	Karaikal	Mahe	Yanam	Total
1963-64	..	..	10.80	0.80	0.063	0.20	11.863
1965-66	..	..	12.00	1.05	0.12	0.26	13.43
1970-71	..	..	14.70	1.55	0.20	0.34	16.79
1975-76	..	..	19.20	2.00	0.25	0.43	21.88
1980-81	..	..	22.00	2.60	0.30	0.46	25.36

Details of the actual demand for power between 1954 and 1976 are given below :

Year			Demand (in MW)	Energy (in million units)
1954	..	..	1.70	3.00
1961	..	..	7.00	29.00
1966	..	..	12.46	60.00
1967	..	..	11.30	54.00
1968	..	..	12.62	72.00
1969	..	..	17.44	90.00
1970	..	..	17.44	88.00
1971	..	..	20.69	96.50
1972	..	..	20.91	101.20
1973	..	..	23.70	103.00
1974	..	..	28.10	108.30
1975	..	..	28.68	128.00
1976	..	..	28.12	122.60

A comparison of the above two statements will show that the actual demand had outstripped the projections of the National Council for Applied Economic Research. The phenomenal increase in demand may be attributed to the rural electrification programme and the growth of industries. Till 1966 the increase in power consumption was mainly confined to Pondicherry region. The projected demand for 1976-77 was placed at 30 MW (130 million units). It was expected to touch 200 MKWH in 1978-79 and 350 MKWH in 1983-84.¹⁶³

The power requirements of Pondicherry and Karaikal regions are obtained in bulk from the Tamil Nadu Electricity Board, that of Mahe from the Kerala State Electricity Board and that of Yanam from the Andhra Pradesh State Electricity Board in accordance with the terms of agreements reached with the respective Governments.

The details of power purchased from the concerned Electricity Boards since 1966-67 for Pondicherry, Karaikal and Mahe regions are furnished below :*

			Pondicherry	Karaikal	Mahe
			Rs. P.	Rs. P.	Rs. P.
1966-67	..	..	46,75,119.00	—	—
1967-68	..	..	51,70,623.34	1,02,815.41	—
1968-69	..	..	59,35,611.50	4,41,104.64	29,054.45
1969-70	..	..	58,58,688.17	5,66,325.90	65,826.71
1970-71	..	..	63,69,641.36	5,75,715.20	1,39,103.89
1971-72	..	..	66,20,430.20	6,19,821.20	1,02,276.30
1972-73	..	..	66,87,900.40	6,98,989.32	2,76,697.49
1973-74	..	..	73,15,373.68	7,82,703.94	3,47,390.62
1974-75	..	..	1,08,85,622.50	11,09,132.85	3,51,945.93
1975-76	..	..	1,00,68,405.49	12,64,234.35	3,89,733.06

Since the Territory depended entirely on Tamil Nadu for meeting the growing demand for power, it was recommended that the Territory which was already a member of the sub-committee for power in the Southern Zonal Council should also be associated with the Southern Regional Electricity Board and that advance action should be taken for negotiations with them so as to be assured of the power needs in time.¹⁶⁴

The possible resources for generating power in the Territory are lignite, oil and natural gas. Lignite was found at Bahur at depths varying from 62 to 91 metres below ground level and the extent of resources is not known.

* The figures upto 1970-71 have been taken from the Thirteenth report of the Estimates Committee 1971-72, p.21.

Similarly, investigations carried out by the Oil and Natural Gas Commission in Karaikal showed no definite prospect about the availability of oil in that region. Hence the entire power requirement of all the four regions have to be met from the adjacent states of Tamil Nadu, Kerala and Andhra Pradesh. As a long term measure, it was proposed to set up a coal based thermal power station in Pondicherry with a capacity of 2 x 110 MW sets. A feasibility report for the power plant was prepared by the Central Electricity Authority. The matter was under consideration. The plant was expected to function on sea borne coal obtained from West Bengal.

Purchase and sale of power :

The question of determining the rates for the inter-state sale of power was entrusted to the Venugopal Committee. Although the Committee had since tendered its recommendations, no agreement has been reached on the question of obtaining power at the rates recommended by the Committee. The recommendations of Venugopal Committee in respect of rates for inter-state sale of power were circulated in 1966. The purchase price of power determined in 1965 was subsequently revised in 1974. The rates for the purchase of power from Tamil Nadu in force since 1974 are shown below :

Demand charge :

for the first 500 KVA	..	..	Rs. 8 per KVA
for the next 500 KVA	..	..	Rs. 7 per KVA
for every KVA in -excess	..	..	Rs. 6 per KVA

Energy charge :

for the first one lakh units	..	..	5½ paise per unit.
for the next two lakh units	..	..	5 paise per unit.
for the next five lakh units	..	..	4½ paise per unit.
for every unit in excess	..	..	3½ paise per unit.

In addition to the demand charge and energy charge, a surcharge of 30 per cent on both the demand and energy charges and an additional surcharge of 5 per cent on the overall charges are also paid.

The power is purchased at the rate of 9 paise per unit from the Kerala State Electricity Board for distribution in Mahe region.

The power so purchased is sold at different rates for different purposes designated as general, domestic, domestic bulk, power load, agricultural, combined lighting and power lighting, public lighting and high tension. New industries enjoy concessional rates of high tension rates. The tariff rates were last enhanced with effect from 1 August 1974. The order also specified the meter charges, hire charges for ceiling fans, meter testing charges, installation testings, reconnection charges, surcharge for belated payment, etc. 165

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CHAPTER VI

BANKING, TRADE AND COMMERCE

I. History of indigenous banking

The Diary of Anandarangapillai provides some clues about the system of banking in XVIII century Pondicherry. *Sowcars* were leading bankers in those days. We hear of such famous *sowcars* as Govardhanadas, Kasidas Bukhanji and Vallaba Sundar, all of whom carried on their banking operations through their *gumastas* in Pondicherry. The use of drafts, bills of exchange ¹ or hundis payable at sight or after a prescribed period was very much in vogue.² Such drafts were also transferable. We learn that in 1754 when Dupleix refused to honour a bill for a lakh of rupees drawn on him by Bussy, the principal *sowcars* recalled their agents from Pondicherry. These *sowcars* further resolved that no more bills should be drawn on Pondicherry nor should any drawn here be honoured. The closing of these agencies reduced Pondicherry's importance as a banking centre.

The shroffs were professional money-lenders in Pondicherry. We hear that Melugiri Chetty, Rayalayyan and Guntur Balichetti were some of the leading shroffs of the town. Besides these shroffs, the well-to-do also thrived by lending money to the needy. On one occasion, Anandarangapillai himself reports to have given a loan of 6,000 pagodas to Governor Godeheu at eight per cent interest over a bond.³ The interest rates to be charged were, however, fixed by proclamation. Anandarangapillai tells us that during Godeheu's time, orders were issued limiting the rate of interest for Europeans at eight per cent and for the natives at 12 per cent per annum. These rates were not always strictly observed. It is interesting to note that a premium of 18 per cent was also charged on loans. A special charge of monsoon risks at 10 per cent was also collected over and above the interest.⁴ Anandarangapillai himself attests to the fact that there were people who charged from 10 per cent to 12 per cent per month i.e. as much as ten times the official rate. Governor Leyrit had to repeat the order that the interest rate should not exceed eight per cent for Europeans and 12 per cent for the Tamils per annum.⁵ We find that in those days the Administration resorted to the manipulation of interest rates to regulate the

local money-market. In an attempt to induce the public to lend to the Government, the Council decided in August 1759 that 12 per cent interest should be allowed on all sums which the *mahanattars* and others might lend to the Administration.⁶

Another interesting bit of information relates to the use of parchment money bearing the Company's seal. During Leyrit's time it was ordered that none should refuse the new parchment money from one rupee onwards at its face value in exchange for their goods. It was also made known that the parchment money will be accepted by the Company at its face value. This currency is said to have consisted of 10-month bonds carrying 12 per cent interest. The Council, however, was unable to redeem them as they matured. As Pondicherry was not accustomed to fiduciary issues, these notes came to be exchanged at a heavy discount. These notes were actually wanted only by those who owed money to the Company. Such people bought them cheap in order to pay off their debts. In protest the shroffs and cloth merchants of the town resorted to a '*bandh*'. Leyrit had perforce to announce that the shroffs and bazaarmen need not be compelled to accept the parchment money.

The indigenous bankers who belonged to different communities lent money on the security of jewels and also on promissory notes. They functioned both in urban and rural areas. Most of the loans were short-term, repayable with interest after the harvest of the crops, either in one or more instalments. The conditions were informal in that the loans could be obtained at any time and without any security depending on the confidence and the relationship of the lender with the borrower. This system had its own shortcomings. The urgent and unforeseen needs of the borrowers and their inability to provide sufficient security was capitalised by the antisocial bankers for charging interest at more than the usual rates. Some money-lenders charged interest ranging from 18 to 36 per cent. The antisocial elements among them charged interest rates as high as 100 to 120 per cent per annum. Very often a sizable portion of the interest was deducted in advance from the borrowers at the time of lending itself. The traders could, to some extent, bear the high rates of interest because they could pass on the burden to the consumers. But this was not so with the agriculturists who, in this territory as in other parts of India, had no work for the best part of the year. They required money in the lean season i.e., about three or four months prior to the harvest. It was during this season that the prices were high, and

consequently, the money value was less. But they had to repay the loans immediately after harvest when the money value would be more, as the prices of commodities would be less. What was worse was that in many cases the interest was payable in kind. Hence, a sizable portion of the hard earned produce found its way to the godowns of money-lenders.

Droughts and crop failures, floods and damages caused by the rains very often affected the repaying capacity of the borrowers. The money-lenders would only lie in wait for an opportunity to buy off the properties of the borrowers on terms dictated by them. The terms were naturally to the detriment of the borrowers. Thus the agriculturists gradually lost their properties which passed into the hands of the antisocial money-lenders.

Mont-de-Piété : With a view to remedy these social evils, the French had set up the famous *Mont-de-Piété* (initially at Pondicherry) which may be called as pawn office, by means of an ordinance dated 1 May 1827. The institution was provided with necessary funds from the reserve fund. It rendered great service to the needy sections of the population and notably the small agriculturists by providing them advances at reasonable rates of interest. The institution gave loans from Rs. 3 to Rs. 3,000 on the security of jewels and silver articles depending on the value of the security, the amount of loan ranging from 1/4th to 4/5th of the total value of gold ornaments or silver articles, as the case may be. The rate of interest fixed at 8 per cent was generally collected after the expiry of one year. The income from the transactions of the institution was set apart for charity.

Following the successful functioning of the institution in Pondicherry, the Government set up similar institutions at Karaikal, Mahe and Yanam under the *arrêtés* of 29 July 1907, 9 October 1929 and 14 June 1946 respectively. As a further measure of relief the Government issued a decree promulgated on 9 November 1935 fixing the legal rate of interest at five per cent and the maximum conventional rate at eight per cent per annum. Those required to pay more than the above rates could go to the courts to enforce the legal rates.⁷ Thus the Administration seems to have taken steps to mitigate the evils of money-lending. As the institutions had only limited resources at their disposal, they were unable to meet the credit requirements of the people. Moreover, located as they were at the regional headquarters it was not always possible for the villagers to come over to these towns for the sake of borrowing petty amounts.

The decree of 22 February 1906 provided for the licensing of private banks which wanted to enter the pawnbroking business.⁸ It appears that for many years no one came forward to register his business under the provisions of this law probably because one had to pay a huge amount by way of security deposit. But pawnbroking business was carried on in the stealth without proper authorisation.

This state of affairs continued even after *de facto* merger. However, it was found necessary to bring forward some legislation to curb the abuses of unauthorised pawnbroking and to safeguard the interests of the borrowing public. It was in these circumstances that the Pondicherry Pawnbrokers Act based on the Madras Pawnbrokers Act, 1943 was passed in 1966 with slight modifications to meet the local requirements and brought into force on 15 October 1966. The Usurious Loans Act, 1918 (Central Act) extended to this Territory in 1968 was brought into force on 1 September 1970. Details of the number of pawnbrokers in the Territory are furnished below :

As on 31 March

Year	Pondicherry			Karaikal	Mahe	Yanam
1966	26	—	—	—
1967	41	15	—	—
1968	64	18	—	—
1969	44	24	—	—
1970	98	27	—	—
1971	106	37	—	1
1972	131	48	—	3
1973	149	50	—	4
1974	153	51	—	4
1975	161	55	1	5

The Pondicherry Money-Lenders Act, 1970 (26 of 1970) which sought to regulate and control the business of money-lending by introducing the system of registration was assented to on 19 August 1970 and made applicable to Karaikal region with effect from 1 October 1970.⁹ Region-wise details of licensed money-lenders in the Territory are given below :

(As on 31 March)

Year			Pondicherry	Karaikal	Mahe	Yanam
1972	..	..	24	3	—	3
1973	..	..	24	4	—	4
1974	..	..	34	5	—	3
1975	..	..	36	6	1	3

The Tahsildars and Deputy Tahsildars function as Inspectors under the Acts with power to inspect the accounts of the licencees periodically and to take legal action against offenders. Here it may be worthwhile to take note of the findings of a survey conducted by the Indian Bank in 1970. According to this survey, pawnbrokers in rural areas were having a large turn-over of business as they advanced loans mostly to farmers against the pledge of gold ornaments. They charged very high rates of interest. It was pointed out that in order to effectively offset the adverse effects of such lending operations on the farmers, branches of banks already established in Pondicherry town and those proposed to be opened at various rural unbanked centres in the Union Territory of Pondicherry should take the initiative in extending adequate credit facilities to those farmers against pledge of gold ornaments at reasonable rates of interest and minimum margin.¹⁰ The survey further revealed that commercial banks operating in the Territory 'have more or less confined their operations' in areas in and around Pondicherry and Karaikal towns. After assessing the agricultural activities of the regions of Pondicherry and Karaikal, the survey came to the conclusion that there was a good case for establishing several branches of commercial banks in the Territory. As a result of the survey, a few branches were opened in the rural areas.

Nevertheless, money-lenders and pawnbrokers have a great hold over agriculturists and others, and their success lies in their intimate knowledge of their customers. Besides, the terms are mostly informal and there is no hard and fast rule about the security or interest. Therefore, the indigenous bankers still continue to attract all those people who cannot afford to conform to the rules and regulations laid down by the banks for the grant of loans. There has been an influx of the professional money-lenders and pawnbrokers from Gujarat and Rajasthan after the passage of the above said Acts. A study carried out in May 1973, showed that these pawnbrokers charged interest from three to five paise per rupee per month against the mortgage of gold jewels and ten paise on the mortgage of brass and copper vessels.¹¹ This works out to an interest of 36 to 120 per cent per annum. According to this survey, 'pawnbrokers come to their (people's) help in times of financial emergency. But the banks are not coming forward to help the lower sections even though the people are willing to mortgage valuable goods and even pay a higher rate of interest than the banks usually charge in respect of large loans. The public have expressed that commercial banks cannot expand their business and increase their constituents unless they adapt the lending techniques of pawnbrokers. In conclusion, the report stated that "it would be to the mutual benefit of the banks and the public if commercial banks could take to small lendings against mortgage of jewels and utensils in a big way. This would free the people from the exploitation of pawnbrokers and it would also promote the banking habit among the lower strata of people'

II. General credit facilities available

Joint Stock Banks :

Banque de l'Indochine : The first bank on modern lines to be established in Pondicherry was the '*Banque de l'Indochine*' (Indochina Bank) which had its head office in Paris. The establishment of a branch of this bank in Pondicherry was authorised by the presidential decree of 21 January 1875 promulgated by the *arrêté* of 2 March 1875.¹² Prior to this, however, the British '*Oriental Bank*' had a branch in Pondicherry. Soon after the entry of the Indochina Bank, the Oriental Bank had to withdraw from the field.

The **Banque de l'Indo** hine not only dealt with all kinds of banking operations but also enjoyed the privilege of issuing notes. Sometime during 1892-93 the '**Comptoir d'Escompte**', another French Bank, is known to have opened a branch in Pondicherry. Even this bank had to withdraw from the field on representations made by the Indochina Bank.

With the extension of the Banking Companies Act, 1949 and the Foreign Exchange Regulation Act, 1947 to Pondicherry in 1954 the stage was set for Indian banks to open their branches in this Territory. But even before the final withdrawal of **Banque de l'Indochine** from Pondicherry in March 1955, the Indian Banking Industry had made its debut in this Territory.

United Commercial Bank : A branch of the United Commercial Bank Limited started operating in Pondicherry from 6 December 1948, as it was felt that there was scope for Indian banks to do business here. When in March 1955 the **Banque de l'Indochine** decided to wind up its operations in Pondicherry, the United Commercial Bank took over the entire business of the said bank including their assets and liabilities and thus 'became the successor of **Banque de l'Indochine** in Pondicherry.

The bank extends every kind of banking facility to the public. They accept saving deposits, term deposits, recurring deposits and give advances to industries, trade and commerce. They deal in foreign exchange business, finance import and export and open letters of credit besides buying and selling Travellers' Cheques (both Inland and Foreign), providing safe deposit locker facilities and accepting sealed packets for safe custody. They advance loans to the people against gold ornaments (22 carats purity). This bank specialises in foreign exchange business and seems to hold sway over a major portion of the business, besides negotiating bills covering exports to various countries. With a network of branches in India and 'Correspondents' abroad, the bank attends to every kind of banking business both inland and foreign. A perceptible change in the lending operations of the bank is evident from a close study of loans and advances granted by the bank after nationalisation, especially in favour of agriculturists, small-scale industrialists, transport operators, self-employed persons and small traders.

By and large, a good proportion of its clients are individuals who are either professionals or retired French pensioners. Most of the pensioners who draw pension from the French Government maintain their accounts with this bank.

A field survey was conducted by the bank before opening its branches in Bahur and Villiyanur. The survey revealed that there was great potential in these areas for mobilisation of deposits, although the people were neither attuned to banking habits nor inclined to deposit their savings with the banks. The rural rich preferred to invest in fixed assets where there was the possibility of capital appreciation and better return. They seldom opted to deposit their surplus funds with the banks. The tendency was to give private loans or to invest in public limited companies which gave a better return, rather than keep the savings with the banks. Another of its findings was that the local entrepreneurial skill was not forthcoming to set up industries in this Territory. Though there were people with resources, they were shy of investing their money in industries or in equity shares.

The four branch offices in Pondicherry region are located at :

1. rue Mahe de La Bourdonnais (Main Office).
2. 22, Jawaharlal Nehru Street, Pondicherry.
3. 6/51, West Street, Bahur.
4. 2/25, Odiyambattu-Villupuram Road, Villiyanur.

A branch was opened in Karaikal on 10 August 1973. The branch at Villiyanur which started functioning from 14 December 1970 advances loans to villagers in and around that area. While the public have shown great eagerness to avail loan facilities from these banks, they have not shown the same degree of enthusiasm to deposit their surplus funds in the banks.

The bank came forward to adopt a few villages in the Territory for development under special care. A survey of some villages in the Territory was conducted and the villages of Sellippattu, Kumarapalayam and Suttukanni in Mannadipattu Commune were adopted for intensive care. Agriculturists in these villages are given liberal advances for agricultural development.

The Indian Overseas Bank : The Indian Overseas Bank opened its first branch in Pondicherry as early as on 1 August 1948. It deals with all kinds of banking transactions including foreign exchange, agricultural finance, etc.

The depositors are mostly middle class businessmen, salaried persons and French pensioners, educational and religious institutions. As on 31 December 1975 three branches of the bank were in operation in Karaikal region viz. Karaikal, Tirunallar and Tirumalarajanpattinam.

The State Bank of India : The Imperial Bank of India, which subsequently came to be known as the State Bank of India, first established a Pay Office in Pondicherry on 1 November 1954. But it was on 26 May 1955, that a full-fledged branch of the bank started operating here. A comprehensive set of modern banking facilities including foreign exchange facilities are provided by the bank. The depositors mainly consist of middle-class and upper-middle class people; deposits from institutions, etc. are also held. Proposals for loan from small and big industries, professional men, self-employed persons, etc. are entertained within the frame-work of national priorities and goals. As on 31 December 1975, five branches were in operation in the Territory. Under the 'Village Adoption Scheme', the villages of Gudappakkam, Bahurpet, Tondamanattam and Kalapet were adopted for provision of comprehensive credit to small farmers. The other branches of this Bank are located at Reddiarpalaiyam, Karaikal and Yanam. The State Bank branch at Dhanwantarinagar serves only the residents of Jipmer campus.

Indian Bank : The Indian Bank opened its first branch in Pondicherry on 15 September 1958. The bank operates several schemes to help small-scale industries, agriculturists and self-employed persons. This is one of the few banks in Pondicherry operating a Consumer Credit-Instalment Loan Scheme. Under the 'Lead Bank Scheme' sponsored by the Reserve Bank of India, the Union Territory of Pondicherry is assigned to the Indian Bank. As on 31 December 1975 there were six branches in this Territory viz. at Pondicherry, Villiyanur, Ariyankuppam, Kariamanikkam, Tirukkanur and Karaikal.

Canara Bank : A branch of the Canara Bank was opened on 27 November 1967 at Muttiyalupettai, a suburb of Pondicherry which did not have adequate banking facilities. This was subsequently shifted to the town. The bank deals with all kinds of banking transactions including foreign exchange business. The bank assists import and export trade, deals with remittances, collection and negotiation of bills, grants loans against pledge of gold ornaments, etc. Although the bank does not issue Travellers' Cheques, letters of introduction are given to its customers to enable them to

encash their cheques drawn on the issuing branch upto a specified amount while on business tour. Most of its depositors belong to the low income group as well as the salaried middle income group, besides small organisations. Agriculturists in selected villages were advanced liberal loans for the purchase of pump-sets, tractors etc., and towards crop loans. The bank has also a branch in Karaikal.

Bank of Baroda : The Bank of Baroda started a branch in Pondicherry on 9 March 1970 as part of its programme to open branches in all State capitals and other port cities in the country. It transacts all kinds of banking business. Under its Special Credit Card System, facilities are given to approved clients to encash their cheques in any of its branches in India. The Bank has a special Festival Deposit Plan and Peoples' Savings Banks. The branch deals in pawn business to help agriculturists.

Besides these banks, the Bank of Madura, the Lakshmi Vilas Bank Ltd. and the Vysya Bank have also opened their branches in the Territory. The Lakshmi Vilas Bank Ltd., has also another branch in Karaikal. Mahe is also served by a branch of the Syndicate Bank and the South Indian Bank.

The public have not in general taken to the banking habit. While the public have shown great enthusiasm to avail of loan facilities from the banks, they have not shown the same degree of enthusiasm to deposit their surplus funds in the banks, underlining the need for an intensive campaign for deposit mobilisation. The response of the people to deposit mobilisation efforts was not found very encouraging. The moneyed classes show an inclination to resort to private lending at higher rates of interest without realising the risks involved. Otherwise they invest in buildings and jewels or prefer to keep cash on hand.

The number of accounts in the bank branches in rural areas was considerably less, as people in the villages were maintaining accounts in town banks. Not all rural clients originally banking in urban branches have subsequently transferred their accounts to rural branches.¹³ A survey carried out by the Directorate of Pilot Research Project showed that people from all the communes in Pondicherry region availed of the banking facilities of Pondicherry town. There appears to be a more even spatial distribution of villages in respect of this functional facility available at Pondicherry town. Cuddalore banks serve the villages of Bahur and Nettappakkam Communes. Villupuram banks serve the villages of Mannadippattu, Nettappakkam and Villianur Communes. Nellikuppam banks serve a few nearby villages of Bahur Commune. There is no inter-action with Panruti and Tindivanam towns.¹⁴

According to the same survey, except the State Bank branch at Reddiyar-palaiyam and the branches of the Indian Bank, other banks in Pondicherry region were not so active in meeting the financial needs of the priority sectors. Although all commercial banks covered the entire region, there was no area approach and area demarcation within the region for the banking operations of different branch banks. As a consequence, there was an unhealthy competition among the banks. It seems to have led to concentration of banking operations in certain areas and neglect of some areas within the region. According to the report much remains to be done to bring about a rational banking system in the region. The state of affairs in the other regions is in no way better.

Co-operative Credit Societies and Banks :

The co-operative movement made its entry into the territory only after merger to serve the priority sector. There were of course institutions such as **Syndicats Agricoles, Caisses Communes and Mont-de-Piété** which by and large served the needs of agriculturists. Even the laws imposing restrictions on the rate of interest were stringent. Nevertheless, the lot of the poor agriculturists in the territory was deplorable at the time of merger. Moreover, the number of landless agriculturists in the territory also showed steady increase. Although the well-to-do farmers did not very much depend on outside finance to carry on their agricultural operations, the small farmers and tenant holders badly needed finance to carry on their agricultural operations. They also had to withstand the effects of droughts and floods from time to time. All these factors placed the small farmers at the mercy of the money-lenders. Thus the introduction of co-operative institutions in the Territory came as one of the salutary results of merger. The co-operative credit system in the Territory is built upon a two-tier structure i.e., the Apex Financing Agency at the top and the credit societies at the primary level.

The Pondicherry State Co-operative Bank Ltd : Prior to the opening of the Pondicherry State Co-operative Bank, the financial requirements of the co-operative societies in Pondicherry region were met by the South Arcot District Co-operative Central Bank. Similarly societies in Karaikal, Mahe and Yanam regions obtained their financial requirements from the Kumbakonam Co-operative Central Bank, the Malabar District Co-operative Central Bank and the Kakinada District Co-operative Central Bank respectively. There was no problem as long as the number of societies remained few and their financial requirements small.

With the opening of the office of the Registrar of Co-operative Societies in 1954 more and more societies catering to the requirements of different segments of population came to be organised in the Territory. As on 31 March 1957 there were 60 co-operatives: 43 in Pondicherry, nine in Karaikal and four each in Mahe and Yanam.

As the co-operatives then met with practical difficulties in approaching the banks in other States, it was thought fit to open an apex bank which could bring all the co-operatives in the Territory within its ambit. It was with this end in view that the Pondicherry State Co-operative Bank Ltd. was duly registered on 10 October 1958. The bank started functioning from 30 October 1958.

The Pondicherry State Co-operative Bank which has jurisdiction over the entire Territory is the Apex Co-operative Bank and the Central Financing Agency in the Co-operative sector channelling the funds received from the Reserve Bank of India to the affiliated credit societies at a lower rate of interest. It provides short term and medium term agricultural loans to the agriculturists through its affiliated societies. The bank also issues medium-term loans for non-agricultural purposes to public servants through the affiliated staff co-operative societies to a limited extent. Prior to the implementation of crop loan system i.e., before 1 July 1966, the short term loans for seasonal agricultural operations and marketing of crops were repayable within a period of 12 months from the date of disbursement of the loans. The repayment of loans within the stipulated time to the societies concerned by members from out of the sale proceeds of the crop cultivated by them was not properly ensured either in the case of the bank or the village agricultural credit societies. Following the adoption of the crop loan system with effect from 1 July 1966 the period of recovery of the loan from the members came to be linked with the period of harvest. Further, in order to detract cultivators from utilising the agricultural loan for non-agricultural purposes, loans for different crops are disbursed only during the cultivation period. In order to ensure further effective utilisation of loans, one fourth of the loan is disbursed in kind.

Cash credit loans are issued to the Urban Banks and large sized co-operatives for issue of jewel loans to their members. Overdrafts to individuals especially to the business community are also arranged to a limited extent. Loan on term deposit to the extent of 90 per cent is also provided. The bank

has a safe deposit vault for the use of its clients. Besides the above type of loans, cash credit loans to weavers co-operative societies for the production of handloom cloth are also granted.

During the year 1970-71 the loan transaction of the bank was of the order of Rs. one crore. During 1974-75 it was of the order of Rs. 111.92 lakhs. The Reserve Bank of India sanctioned a credit limit of Rs. 50.00 lakhs to this bank for its agricultural programme for 1971-72. The credit limit sanctioned for 1974-75 was also Rs. 50.00 lakhs.

As on 30 June 1970 as many as 94 agricultural credit societies, one farming society, three marketing societies, two primary co-operative banks, 11 non-agricultural credit societies, 14 consumer stores societies, 12 weavers societies, 19 industrial societies, two housing societies and 16 other types of societies were affiliated to the bank. There were 21 individual 'C' class members on that date.

The resources position of the Pondicherry State Co-operative Bank in June 1970 and June 1974 is given below :

(Rupees in lakhs)

Share capital			As on June 1970	As on June 1974
Authorised	..	..	40.00	40.00
Paid-up capital	..	..	20.74	25.66
Deposits	..	..	38.88	63.12

The Reserve Bank is the main source from which funds for the bank are obtained. The details of borrowings from the Reserve Bank of India between 1965-66 and 1974-75 are furnished in the following statement :

(Rupees in lakhs)

Year	Short term	Medium term
1965-66	25.00	4.60
1966-67	14.00	5.23
1967-68	17.00	2.62
1968-69	25.00	0.99
1969-70	25.00	Nil
1970-71	31.00	Nil
1971-72	29.50	10.00
1972-73	22.25	6.66
1973-74	14.00	3.81
1974-75	20.14	15.95

A sizeable portion of funds required for advancing loans is obtained through floatations of debentures. The following series of debentures were issued by the bank:

(Rupees in lakhs)

1.	First series	Ordinary	..	..	4.53
2.	Second series	„	..	..	5.00
3.	Third series	„	..	..	4.95
4.	Fourth series	„	..	..	5.00
5.	Fifth series	„	..	..	11.00
6.	Sixth series	„	..	..	11.00
7.	Seventh series	Ordinary debentures	..	..	16.50
	2. No.	Rural debentures	..	..	1.17
8.	Eighth series	Ordinary	..	..	10.50
9.	Ninth series	„	..	..	11.00
10.	Tenth series	„	..	..	9.00

The day to day administration of the bank (located in its own building at 72, Lal Bahadur Shastri Street, Pondicherry) is the responsibility of the Secretary who is assisted by an Assistant Secretary and a number of Supervisors. The bank has two branches, one in Karaikal and the other in Pondicherry Bazaar. The branches of the bank are run by experienced supervisors as agents.

The business of the bank is carried on by a Board of Management consisting of 12 Directors out of whom seven are elected from affiliated societies, two from individual shareholders and the rest nominated by the Government.

The Pondicherry State Co-operative Land Mortgage Bank Ltd : As there was no co-operative institution to meet the long term credit requirements of ryots in the Territory, it was felt necessary to organise a co-operative land mortgage bank in the Territory. Accordingly, the Pondicherry State Co-operative Land Mortgage Bank was duly registered on 1 July 1960 although it started functioning from 7 April 1960 in accordance with the provisions of the Madras Co-operative Societies Act, 1932 which stood extended to this Territory in 1954. The Administration subscribed Rs. one lakh towards share capital of the bank. This was the only co-operative unit functioning both as a primary institution as well as an apex institution in the Territory directly issuing long term loans not exceeding Rs. 50,000 to ryots in all the four regions for agricultural purposes. A sum of Rs. 84,000 was advanced by the Government of India to this bank. The bank also resorted to the mobilisation of funds through floatation of ordinary debentures. Upto 31 March 1975 the bank floated debentures to the tune of Rs. 89.65 lakhs in ten series to augment its resources. As on 30 June 1975 the bank had 3,350 members with a paid-up share capital of Rs. 10.48 lakhs out of which Government contributions amounted to Rs. 4.97 lakhs.

Upto 30 November 1970 the bank had advanced long-term loans to the extent of Rs. 46.38 lakhs and the quantum of loans outstanding was Rs. 39.44 lakhs. The amount of loan outstanding as on 31 March 1975 was Rs. 69.98 lakhs.

Since its inception the bank has been running on profit. In the initial years, the bank provided finance to the agriculturists to repay their old debts and rescue them from the clutches of money-lenders. The loan policy underwent some changes under the direction of the Reserve Bank of India with emphasis on increase in agricultural production. Under the new dispensation

long term loans are advanced only for productive purposes such as sinking of bore-wells, purchase of motor pump sets, land reclamation and purchase of agricultural machineries such as tractors, trailers and other power tillers, etc.

Primary Agricultural Credit Societies : A large number of primary agricultural credit societies came to be formed at the village level soon after merger with a steady increase in their number since then. As on 30 June 1970 there were 94 primary agricultural credit co-operatives in the Territory. The scale of operations of the village societies was also substantially stepped up. The quantum of loans issued increased to Rs. 57.00 lakhs in 1969-70 and the membership in village co-operatives increased to 16,000 covering about 40 per cent of the rural population. A programme for reorganising the agricultural credit societies into viable units was taken up during the year 1969-70. The standard of viability was fixed and the societies were identified after a survey made by the Pondicherry State Co-operative Bank. In all, about 30 societies were identified as weak. It was decided to amalgamate these societies with the neighbouring ones to form them into viable units, having a loan transaction of rupees one lakh and more. As a further incentive, the Government came forward to contribute at the rate of Rs. 5,000 towards share capital of most of the societies. As a result of the reorganisation, the number of credit societies stood reduced to 73 in June 1971, to 68 in June 1972, to 66 in June 1973, to 64 in June 1974 and to 65 in June 1975. The progress made by the agricultural credit societies after the reorganisation launched in 1970 will be evident from the following statement :

(Rupees in thousands)

Sl. No.	Particulars	Unit	As on 30 June			
			1970	1972	1974	1975
1.	No. of societies	No.	94	68	64	65
2.	No. of members	"	16,000	16,000	23,000	24,000
3.	Paid-up capital	Rs.	11,68	14,79	21,48	23,83
4.	Reserves and other funds	"	4,21	8,95	17,77	19,89
5.	Loans issued	"	57,22	62,80	68,30	73,01
6.	Loans outstanding	"	67,10	66,14	87,48	99,53
7.	Working capital	"	79,22	1,01,80	1,47,94	1,61,87
8.	Value of non-credit business handled	"	12,30	55,00	87,18	1,17,23
9.	Societies running on profit	No.	84	59	50	53
10.	Societies running on loss	"	10	9	14	12

The reorganised societies were expected to issue production loans to the extent of Rs. 60.00 lakhs during 1971-72. The volume of production credit disbursed by co-operatives reached Rs. 66.35 lakhs by 30 June 1973. But for the entry of commercial banks in the field of agricultural credit, the performance of the co-operative sector would have been better.

The loaning policy and procedure were further streamlined to realise the objectives of the Marginal Farmers Schemes and the Agricultural Labourers Development Programme. As a result of these measures the coverage of the agricultural population in the Territory was expected to go up to 45 per cent at the end of June 1972.*

In order to enable the rural societies to enlarge their non-credit activities, the scheme for providing assistance to co-operative societies for the construction of godowns of 100-metric tonne capacity was introduced during 1961-62. According to the revised pattern of assistance, a loan-cum-grant of Rs. 12,500 per godown (62½ per cent loan and 37½ per cent subsidy) was made available to the societies since 1970-71. As on 30 June 1974 as many as 52 societies had their godowns constructed. Given below are the details of Village Co-operative Agricultural Credit Societies which were extended assistance under this scheme :

Sl. No.	Details of societies	Year of assistance
1.	Seliyamedu	.. 1961-62
2.	Koralimedu	.. 1961-62
3.	Sorappattu	.. 1962-63
4.	Molappakkam	.. 1962-63
5.	Tiruvandarkovil	.. 1963-64
6.	Madukkarai	.. 1963-64

* According to the Directorate of Pilot Research Project only one out of seven persons in Pondicherry region was covered by the co-operative movement. *vide* Study Area Profile, Pondicherry region (1973), p. 97.

Sl. No.	Details of Societies	Year of assistance
7.	Varachchakudi	.. 1964-65
8.	Karaiyamputtur	.. 1964-65
9.	Panaiyadikuppam	.. 1965-66
10.	Alankuppam	.. 1965-66
11.	Puranasingapalayam	.. 1965-66
12.	Tondamanattam	.. 1965-66
13.	Pudukkuppam	.. 1965-66
14.	Mannadippattu	.. 1965-66
15.	Kirumambakkam	.. 1965-66
16.	Tirunallar	.. 1965-66
17.	Suttukanni	.. 1966-67
18.	Katterikuppam	.. 1966-67
19.	T.R. Pattinam	.. 1966-67
20.	Ambagarattur	.. 1966-67
21.	Ariyankuppam	.. 1967-68
22.	Sanyasikuppam	.. 1967-68
23.	Kottapurinattam	.. 1967-68
24.	Muttirapalaiyam	.. 1967-68
25.	Arugur	.. 1967-68
26.	Korkadu	.. 1967-68
27.	Kovilpattu	.. 1968-69
28.	Uruvaiyar	.. 1968-69
29.	Niravi	.. 1969-70

Sl. No.	Details of Societies	Year of assistance
30.	Kunichampattu	.. 1969-70
31.	Kil Agaram	.. 1969-70
32.	Ambagarattur	.. 1969-70
33.	Kil Puthamangalam	.. 1970-71
34.	Reddiyarpalaiyam	.. 1970-71
35.	Mangalam	.. 1970-71
36.	Embalam	.. 1970-71
37.	Manamedu	.. 1970-71
38.	Suramangalam	.. 1970-71
39.	Villiyannur	.. 1970-71
40.	Thimmanayakenpalayam	.. 1971-72
41.	Kodattur	.. 1971-72
42.	Aranganur	.. 1971-72
43.	Pudukkuppam	.. 1971-72
44.	Gudapakkam	.. 1971-72
45.	Tavalakuppam	.. 1971-72
46.	Karuvadikkuppam	.. 1971-72
47.	Poraiyur	.. 1971-72
48.	Kil Parikkalpattu	.. 1971-72
49.	Murungappakkam	.. 1971-72
50.	Chinna Karaiyamputtur	.. 1972-73
51.	Soryankuppam	.. 1972-73
52.	Murungappakkam	.. 1973-74

It must be noted that these societies also function as fair price shops and as retailers for the distribution of chemical fertilizers. Managers are responsible for the proper working of all these societies.

Co-operative Urban Banks : There were two Co-operative Urban Banks in the Territory, one in Pondicherry and the other in Karaikal. The Karaikal Co-operative Urban Bank Ltd., which was started on 2 December 1955, had to be wound up on 13 July 1971. The object of the Urban Banks is to provide credit to small artisans, traders and others, like public servants, municipal employees, mill workers, etc., besides rendering such rural banking facilities as provided by commercial banks. The Government of India permitted the Pondicherry Administration to execute guarantee deeds to the South Arcot Co-operative Central Bank to an extent of Rs. 2.5 lakhs for the repayment of loan sanctioned to the Pondicherry Co-operative Urban Bank Ltd.

The Pondicherry Co-operative Urban Bank Ltd. was registered on 15 June 1955 and started functioning with effect from 11 July 1955. The Administration of the bank is vested in the hands of a 11-member Board of Directors, of whom five are nominated from 'A' Class members of the bank, four from 'B' Class members having a fixed deposit account and the remaining two representing the Government. The executive functions are carried out by the Secretary of the bank. The Board is required to meet every month and oftener, if necessary, to carry on the affairs of the society.

The banks accept money from the public and their members in the form of fixed deposits, recurring deposits, call deposits, savings deposits and current deposits. Deposits upto Rs. 1,50,000 are exempt from wealth tax and interest received on deposits upto Rs. 3,000 a year is also exempt from income-tax. Loans are granted against the security of gold ornaments and on personal surety. Loan facilities such as cash credits and overdrafts are allowed

to members of the business community. Another encouraging factor is that the bank had been working on profit since its inception. The following statement will show the progress of the bank since its inception in 1955 :

		(Rupees in thousands)		
Details	Units	As on 30 June		
		1956	1966	1975
Members	No.	1,187	14,859	12,731
Share capital	Rs.	95	3,88	4,11
Working capital	„	3,43	20,39	22,27
Amount of loan issued		5,55	22,35	28,47
Net profit		4	35	44

With effect from 1 March 1966 the bank came to be placed under the control and supervision of the Reserve Bank of India. The accounts of the bank are to be audited every year by an officer of the Co-operative Department.

III. General and Life Insurance

Life Insurance :

The Territory had attracted the attention of several insurers even before the formation of Life Insurance Corporation of India following the nationalisation of life insurance in 1955. It is at present covered by four branches coming under four Divisional Offices as detailed below :

Area	Servicing Branch	Controlling Divisional Office
Pondicherry	Pondicherry	Madras Divisional Office.
Karaikal	Nagapattinam	Thanjavur Divisional Office
Mahe*	Tellicherry	Kozhikode Divisional Office.
Yanam	Kakinada	Machilipattam Divisional Office.

* Mahe area was under the Coimbatore Division before its bifurcation.

After the formation of Life Insurance Corporation of India in September, 1956, a sub-office was opened at Pondicherry on 28 January 1961. The sub-office was upgraded in 1962 into a Branch Office offering more facilities to policy holders.

The Salary Savings Scheme was introduced in Pondicherry region in 1968 benefiting non-gazetted government employees. The Salary Savings Scheme is now applicable not only to non-gazetted government servants but also to the employees of mills, local bodies, etc. The scheme which was originally operated by the Divisional Office came to be dealt with at the level of the Branch Office since 1971. The introduction of Group and Superannuation Scheme in the Territory was under examination.

The Own Your Home Scheme has been in operation in Pondicherry since 1971.

The statement below shows the new business secured in the four regions of the Territory since 1957 :

Year	No. of proposals	Sum proposed	No. of policies	Sum assured	No. of field officers	No. of active agents
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Pondicherry :						
1957-58	.. 399	14,13,750	349	14,99,750	1	30
1960-61	.. 693	26,66,950	593	30,50,750	4	62
1970-71	.. 2,633	1,51,26,950	2,589	1,39,300	7	—
1971-72	.. 3,223	1,78,98,450	3,135	1,71,09,950	7	—
1972-73	.. 2,580	1,61,96,500	2,544	1,55,66,500	7	242
1973-74	.. 2,201	1,42,98,500	2,082	1,27,14,500	7	225
1974-75	.. 2,386	1,62,15,500	2,319	1,51,16,500	7	201
1975-76	.. 2,503	2,21,63,250	2,492	2,04,66,250	7	200

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Karaikal :						
1957	.. 57	2,08,000	57	4,07,500	1	2
1960	.. 99	7,57,000	86	5,26,000	1	10
1970-71	.. N.A.	N.A.	425	30,09,000	2	39
1971-72	.. „	„	401	26,31,000	2	37
1972-73	.. „	„	381	29,26,000	2	31
1973-74	.. „	„	401	28,17,000	2	38
1974-75	.. „	„	516	50,21,000	2	40
Mahe :						
1960	.. 110	3,16,500	100	2,78,500	5	8
1970	.. 103	7,99,000	105	7,83,000	4	10
1971	.. 89	8,87,000	87	8,67,000	4	9
1972	.. 112	10,43,250	105	9,81,000	4	9
1973	.. 141	20,12,500	130	13,59,000	4	9
1974	.. 175	19,38,000	173	18,86,000	5	17
1975	.. 173	28,94,500	169	26,72,000	5	13
Yanam :						
1957	.. 12	36,000	8	23,500	1	1
1960	.. 37	1,16,000	35	1,10,000	1	1
1970-71	.. 12	95,000	9	85,500	1	1
1971-72	.. 11	43,000	11	43,000	1	1
1972-73	.. 27	1,71,500	27	1,71,500	1	1
1973-74	.. 8	1,20,000	8	1,20,000	1	1
1974-75	.. 9	74,000	9	74,000	1	2
1975-76	.. 4	19,500	4	19,500	1	1

N.A. = Not available.

General Insurance :

General insurance companies operated in this Territory either through their branches or sub-branches or agents. The Hindustan Ideal Insurance Company, the Union Co-operative Insurance Society Ltd., and the New India Assurance Company, Madras had either a branch/sub-branch or inspectorate in Pondicherry. Companies such as the Madras Motor and General Insurance Company Ltd., the Commonwealth Insurance Company, Calcutta Insurance Ltd., 'Oriental' and 'Motor Owners' canvassed business in the Territory through their agents.

Following the nationalisation of general insurance business in 1972, private companies transacting general insurance business were grouped into four Companies (United India, New India, Oriental and National) and placed under the control of the General Insurance Corporation of India. So far as this Territory was concerned M/s. United India opened a full-fledged branch office at Pondicherry with jurisdiction extending to Karaikal, Mahe and Yanam regions. While M/s. New India continued to have its inspectorate, M/s. Oriental is represented at Pondicherry by a Residential Field Officer. M/s. National Insurance Company maintained only an agency at Pondicherry.

The main sources for fire and transit insurance in Pondicherry are the local industries like the Anglo-French Textiles, New Horizon Sugar Mills, Pondicherry Distillery, Sri Aurobindo Ashram, SICA Breweries, Bharathi Mills, PIPDIC, etc. As for marine hull insurance, the port and fisheries are the main sources. Among banks, the State Bank of India and the Pondicherry State Co-operative Bank provide fire, burglary, cattle and other miscellaneous insurance. As for motor insurances, the various fleet owners and individual vehicle owners among government officials and the general public are the sources.

The latest innovation is the Janatha Personal Accident Policy introduced by all the four nationalised companies which have reported brisk sale of these policies in Pondicherry and Karaikal regions where they have proved very popular.

IV. State assistance for industrial development

Soon after merger, the Administration initiated several measures to speed up the industrial development of the Territory. The establishment of an Extension Centre, three Industrial Estates and three Service-cum-Common Facility Workshops was designed to encourage the growth of small-scale industries in the Territory. The Area Survey Report of 1959, the Techno-Economic Survey of 1965 and the Industrial Potential Survey of 1973, among others, sought to highlight the industrial potential of the Territory. Through the Intensive Campaign of 1969 a better climate for rapid industrialisation was also sought to be created.

Apart from these measures, several incentives are offered to entrepreneurs coming forward to set up industries in the Territory. An account of the various incentives offered by the Administration is furnished in the next few paragraphs.

The Small Industries Service Institute of Madras which studied the industrial climate of Pondicherry in 1959 pointed out that Pondicherry had many important locational advantages for establishing cottage, small-scale and large-scale industries. Among the advantages, the institute mentioned the availability of capital, a large local market and a network of good marketing channels. The Institute further pointed out that the mineral and agricultural resources available in the area could be utilised for developing many industries. However it found the formalities to be gone through for registering new industries both cumbersome and time consuming. The Institute, therefore, recommended that certain areas should be declared as industrial areas where industries could be started without much procedural formalities. It was also emphasised that an *arrêté* for providing financial aid to industries should be passed as early as possible.

Accordingly the State-Aid to Industries *Arrêté* was issued in 1959 providing for the grant of loans upto Rs. 50,000 to small-scale industries and industrial co-operatives for the purchase of land, construction of factory building, purchase of tools, equipment, machinery, etc. The *arrêté* also provided for the payment of a subsidy on interest.

This *arrêté* was replaced by the Pondicherry State-Aid to Industries Act, 1970. Under the State-Aid to Industries Act, loans are made available upto Rs. two lakhs for starting small-scale industrial units. An interest of only 3 per cent is charged for loans upto Rs. 25,000. Details of loans released to private industrialists since 1959-60 are furnished below :

Year			Amount of loan in Rs.	No. of industries/ industrial co-operatives	Subsidy on interest in Rs.
1959-60	..	..	63,500	6	Nil
1960-61	..	..	1,16,450	14	Nil
1961-62	..	..	80,000	11	1,047.64
1962-63	..	..	80,000	21	1,765.00
1963-64	..	..	60,000	8	2,015.75
1964-65	..	..	1,21,600	14	2,476.29
1965-66	..	..	73,000	10	3,461.29
1966-67	..	..	1,78,500	17	5,318.49
1967-68	..	..	3,32,000	18	6,143.29
1968-69	..	..	2,49,000	17	5,189.93
1969-70	..	..	2,27,000	17	6,297.94
1970-71	..	..	2,75,000	28	9,893.49
1971-72	..	..	3,58,650	31	8,374.13
1972-73	..	..	2,00,000	30	14,999.58
1973-74	..	..	3,00,000	31	19,902.49
1974-75	..	..	2,99,000	37	24,751.27

Tamil Nadu Industrial Investment Corporation : Under the State-Aid to Industries Act, 1970, loans upto a limit of Rs. 2.00 lakhs alone could be extended to industrial units. In the absence of a State Finance Corporation which could extend loans over Rs. 2.00 lakhs, the entrepreneurs had no other source of institutional finance. It was in this context that an agreement was reached with the Government of Tamil Nadu in 1968 to extend the jurisdiction of the Tamil Nadu Industrial Investment Corporation, Madras to this Union Territory. Following this agreement the Pondicherry Administration acquired shares worth Rs. 15.00 lakhs in the Corporation. The Corporation now considers applications for loans upto Rs. 25.00 lakhs from small-scale industries.

Moreover, the Industrial Development Bank of India and the Industrial Finance Corporation of India, extended refinance facility to industrial units in the Territory. The Tamil Nadu Industrial Investment Corporation allows a special concessional rate of interest at $9\frac{1}{2}$ per cent with a four year moratorium period and a ten-year amortisation together with other concessions. The Industrial Finance Corporation and the Industrial Development Bank of India offer a lower rate of interest, longer moratorium and amortisation periods and accept a lower margin of security.

Pondicherry Industrial Promotion, Development and Investment Corporation Ltd. : The Corporation was incorporated under the Companies Act, 1956, on 17 April 1974 with an authorised share capital of Rs. 50 lakhs. Its objective is to work for the industrial development of the Territory. The Corporation is managed by a Board of Directors appointed by the Lieutenant-Governor.

The Corporation has obtained a Letter of Intent for setting up a spinning mill with 25,000 spindles. The responsibility to set up new industrial estates in the Territory was also entrusted to the Corporation. The implementation of the Central Government's outright grant or Capital Subsidy Scheme was handed over to this Corporation which had disbursed till the end of 1975, a sum of Rs. 1,35,387.60 sanctioned till then. Schemes for financial assistance to small, medium and large-scale industries as well as technocrats have also been formulated by the Corporation.

Outright Grant : Following the declaration of the entire Union Territory as an industrially backward area in September 1971, entrepreneurs coming forward to set up industries in the Territory became eligible for certain

concessions under the Central Government's 10 per cent outright grant or subsidy scheme. A seven-member State Level Committee was constituted to advise the Government in processing the applications seeking the 10 per cent outright grant or subsidy for backward areas. The scheme was subsequently revised, and industrial units set up on or after March 1973 became eligible for 15 per cent of the total fixed capital investment or after March 1973 became eligible for 15 per cent of the total fixed capital investment or additional total fixed capital investment, as the case may be, as outright grant. These units will be eligible for a subsidy upto a maximum of Rs. 15.00 lakhs.

Registration of Small Scale Industries with National Small Industries Corporation : Arrangements were made in 1959 to register small-scale industrial units with the Directorate General of Supplies and Disposal through the National Small Industries Corporation and Small Industries Service Institute in order to help them market their products. Upto 31 December 1975, the Government had recommended three local small-scale industrial units for registration with the National Small Industries Corporation.

Consultancy Service : Under another scheme, services of experts of the various Regional Productivity Councils of the National Productivity Council and other Organisations which offer consultancy services are made available to small-scale units in the Territory. The cost of consultancy service to the extent of 60 per cent is subsidised by the Government. But the concession is available only in fields for which Small Industries Service Institute is not in a position to render assistance.

Raw Material Depot : In order to supply small-scale industrial units with scarce raw materials, both imported and indigenous, a Raw Material Depot of the National Small Industries Corporation was opened at Pondicherry in 1970. The Raw Material Depot helps secure priority allocations for industrial and scarce materials.

Sales tax exemption/Concession : Small scale units which went into production on or after 6 November 1969 were exempted from the payment of sales tax for a period of five years upto 31 March 1974.

The Government further reduced by half the central sales tax payable in respect of all goods manufactured by small-scale industries other than those manufacturing cycles including their parts and accessories, but duly registered and located in this Territory. It was stipulated that such units should have gone into production before 6 November 1969. This concession which was initially available from 1 April 1972, for a period of one year was subsequently extended upto 31 March 1974. This concession was made available to units manufacturing cycles, including their parts and accessories with effect from 1973. The Government further liberalised this incentive by granting sales tax exemption to small-scale industries as well as large and medium industries for a period of five years from the date of starting production. These small-scale industrial units which started production before 6 November 1969 and those which started production after 6 November 1969 were also declared eligible for 50 per cent central sales tax concession upto 31 March 1977.

Remission of stamp duty : By way of another incentive the Administration declared that mortgage deeds executed by small-scale industrial units on or after 1 October 1970 under the State-Aid to Industries Act, 1970 would be eligible for concessional rate of stamp duty upto September 1973. The Government also announced remission of stamp duty for mortgage deeds executed at Pondicherry by the small-scale industries of Pondicherry in favour of the Tamil Nadu Industrial Investment Corporation Ltd., towards loans obtained. The Administration have also exempted all types of industries from payment of stamp duty for deeds executed in favour of the PIPDIC. This concession was made available with effect from 22 March 1973.

Exemption of registration fee : Small-scale industries in Pondicherry are exempted from the payment of registration fee on mortgage deeds executed at Pondicherry in favour of the Tamil Nadu Industrial Investment Corporation for loans obtained from the Corporation. This concession came into effect from 22 March 1973.

Power subsidy : As a further incentive, the Administration had announced a scheme of power subsidy for low tension and high tension power consuming industries set up after 1 April 1975 in the Territory.

Miscellaneous concessions : The facility for hire-purchase of machinery provided by the National Small Industries Corporation was extended to this Territory in 1964. Small-scale industrial units are eligible for price preference from 7 per cent to 15 per cent, in respect of the products purchased by Government Departments. Moreover, the Administration being a subscribing member of the Indian Standards Institution, all instructions of standards finalised by the Institution can be used by industrial units in the Territory. The engineering and consumer units in the Territory, however, have not shown sufficient enthusiasm in adopting the standards. Industrialists were also taken on tour on a few occasions to industrial centres in India in order to familiarise themselves with the technological advances in the industrial sector.

V. Small Savings

Prior to merger the French Post Offices did not extend savings bank facilities to the public, although such facilities were made available by Indian post offices. After merger, the mobilisation of small savings in the Territory became the responsibility of the National Savings Organisation headed by the National Savings Commissioner with headquarters at Nagpur. The District Savings Officer and the Assistant Regional Director both stationed in Pondicherry since 1956 and 1971 respectively function under the supervision of the Regional Director, National Savings (Government of India), Madras. The Assistant Regional Director and the District Savings Officer who exercise jurisdiction over Pondicherry are responsible for promoting small savings in the Territory. In Karaikal region, the functions are performed by the Assistant Regional Director, Tiruchchirapalli, and the District Savings Officer Nagappattinam. While the salary and allowances of the Assistant Regional, Director and District Savings Officer at Pondicherry are borne by the National Savings Organisation, free furnished office accommodation is provided by the Pondicherry Administration.

State Advisory Board : The State Advisory Board was constituted to advise and guide the Administration on measures to popularise the small savings scheme in the Territory. This Board was last reconstituted in January 1975 with the Chief Secretary as Chairman and the Finance Secretary as Vice-Chairman.

Operation of schemes : The Small Savings Schemes are operated, as anywhere else, through Post Offices. As on 1 January 1976, in all 60 post offices in Pondicherry region attended to savings bank work. As many as 33,856 post office savings bank accounts were in operation in Pondicherry region as per the data furnished by the Head Post Office, Pondicherry. In Karaikal region all the ten Sub-Post Offices and 17 Branch Offices render savings bank facilities. Records held in the Mahe Post Office seem to show that Post Office Savings Bank facility was introduced in Mahe as far back as 1882, simultaneously with the introduction of such facility in British India. Besides the Post Office at Mahe, Post Offices in Naluthara, Pallur and Pandakkal have been providing Savings Bank facilities since 1966, 1969 and 1970 respectively.

Fixed Deposit Scheme : A new type of account known as the Fixed Deposit Scheme was introduced on 15 March 1968 which, however, was in force only upto 31 July 1971. A new facility known as Blocked Deposit introduced with effect from 1 April 1970 continues to be in force.

The Cumulative Time Deposit Scheme : The Cumulative Time Deposit Scheme was introduced during 1959-60. The Five and Fifteen Year Cumulative Time Deposit accounts were discontinued with effect from 1 October 1973. The Ten Year Cumulative Time Deposit Scheme continued to be in force. The Time Deposit Scheme introduced with effect from 16 March 1970 and the Recurring Deposit Scheme introduced on 1 April 1970 continue to be in force.

Cash Certificates : In Pondicherry region three series of Savings Certificates, viz. the 10-Year-National Savings Certificates (I Issue), the 10-Year Defence Deposit Certificates and the 12-Year National Defence Certificates were available to the public till 15 March 1970. With effect from 16 March 1970 the 7-Year National Savings Certificates (II, III, IV & V Issues) were put on sale.

In Mahe region, the 1944 National Savings Certificates are known to be the earliest to be issued by the Mahe Post Office. The next series were that of the 12-Year National Plan Savings Certificates. This was followed by the 12-Year National Defence Certificates. After this came the 10-Year National Savings Certificates (first issue). The Seven-year National Savings Certificate Scheme II, III & IV issues with more attractive terms were introduced with effect from 16 March 1970 which, however, did not prove very popular in Mahe region.

Pay Roll Savings Group : Pay roll savings groups have been formed in a number of establishments since its inception in the year 1962.

The progress of Pay Roll Savings Groups since then with their membership and collections will be evident from the following statement :

Year	No. of existing P.R.S.G's	New P.R.S.G's formed	Total No. of P.R.S.G's in existence	Existing membership in old P.R.S.G's	New members enrolled under new P.R.S.G's	Total membership under P.R.S.G's (old & new)	Annual collection as on 31 March every year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1962-63	7	12	19	221	632	853	41,880
1963-64	19	14	33	853	174	1,027	59,040
1964-65	33	13	46	1,027	222	1,249	74,280
1965-66	46	18	64	1,249	203	1,452	90,540
1966-67	64	17	81	1,452	198	1,650	1,09,260
1967-68	81	24	105	1,650	538	2,188	6,43,220
1968-69	105	21	126	2,188	360	2,548	7,37,470
1969-70	126	18	144	2,548	919	3,467	9,94,705*
1970-71	144	22	166	3,467	289	3,756	4,07,530*
1971-72	166	36	202 †	3,756	1,077	4,833	5,40,455
1972-73 ‡	117	29	146	5,427	510	5,937	6,17,170
1973-74 ‡	146	21	167	5,718	358	7,076	8,28,150
1974-75 ‡	167	10	177	8,775**	222	8,997	8,85,205

* The collections were less due to maturity of accounts.

† The total number of groups came down from 202 to 117.

‡ The figures relate to Pondicherry and Karaikal regions.

** Chiefly due to increase in membership in the old P.R.S. Groups during the year.

Collection under the Standardised Agency System since 1970 was as shown below :

Year	No. of actual Agents	Collections in Pondicherry and Karaikal regions
		Rs.
1970-71 1		5,145
1971-72 6		3,96,300
1972-73 9		4,52,240
1973-74 7		4,45,070
1974-75 4		9,69,090

The Mahila Pradhan Kshatriya Bachat Yazna agency to canvass for the 10-Year Cumulative Time Deposit and Five-Year Post Office Recurring Deposit accounts by ladies on commission basis has also been introduced in Pondicherry region.

The National Service Scheme for college students is operated with the help of student volunteers of Tagore Arts College, Pondicherry in coordination with the National Service Scheme. The Sanchayika or School Savings Bank Scheme has been introduced in some selected schools in Pondicherry region.

The Postal Coordination Committee with the Superintendent of Post Offices, Pondicherry as chairman, maintains close liaison and coordination at the Divisional level to solve problems which crop up.

VI. Chit Funds

The chit fund locally known as *ceetu* serves both as a profitable avenue of investment and a convenient method of small savings. Two types of *ceetu* are popular in the Territory viz. the *kulukkal ceetu* (chit awarded through lots) and *elacheetu* (that which is open to auction). A specified number

of people join together and agree to subscribe a certain sum of money by instalments at fixed intervals for a definite period. The total collection at each interval would be put to auction and the subscriber who offers the highest discount would be entitled to receive the amount. The discount would be shared equally among all the subscribers after deducting the overhead charges which are only nominal. Thus, small savings in instalments grow into big amounts which help subscribers make investment in business or meet large commitments. While subscribers could earn a better return by way of discount for their subscriptions, this works out from 16 per cent to 21 per cent. Sometimes they could also bid for the money to meet their own credit requirements in times of need. The terms are informal and the success of such schemes depend chiefly on the confidence the subscribers repose on the sponsors. Mobilisation of capital being the prime objective of such ventures, profit motive is relegated to the background. Hence, there are few cases of breach of trust calling for any kind of government interference.

Although prior to merger, the subject was dealt with by the **Bureau des Affaires Politiques**, the décret of 22 January 1943, which regulated the functioning of chit fund companies in the former French establishments was not effectively enforced.¹⁵ At the time of merger, a few chit fund companies were already in operation in the town of Pondicherry on the pattern of similar companies elsewhere in India. What came to be started for the purpose of mobilising liquid capital for the promotion of agricultural and trade interests of the subscribers, slowly came to be dominated by commercial institutions whose prime objective was the advancement of trade interests of the foremen who organised and conducted the chits. The interests of the subscribers, who were mostly poor people, were not sufficiently safe. The result was that poor subscribers had to lose their hard earned savings. Thus, commercialisation with all its attendant evils crept into the scheme which naturally attracted government's attention. In order, therefore, to have effective control over the functioning of the chit fund companies and to safeguard the interests of the subscribers, the Pondicherry Chit Funds Act, 1966 modelled after the Tamil Nadu Chit Funds Act, 1961 was passed. This Act, which provided for measures to regulate chit funds, was brought into force on 1 August 1977. Under the Act, the foreman is entitled to a commission not exceeding 5 per cent of the chit amount. Under section 3 (1) of the Act, no persons shall start or conduct a chit without registering the proposed bye-laws of the chit with the Registrar of Chits. However, the companies did not come forward to file their bye-laws,

It became necessary to initiate action against defaulting foremen. Some of the chit fund companies filed a writ petition in the High Court of Madras and obtained an interim stay on the enforcement of the Act. In January 1971 the writ petition was disposed of.

The same year a Registrar of Chit Funds was posted to be in full charge of the enforcement of the Act. The same year as many as 61 bye-laws were registered and certificates of commencement of business were issued to 45.¹⁶ Even after the enforcement of the Act, there have been instances of liquidation of chit fund companies resulting in loss of amount to subscribers.

In addition to the chit fund companies mentioned above, there are also some vessel, furniture and other merchants who run chits. The difference is that the prize winner gets the prize in kind in terms of the agreement and once having won the prize, the subscriber is not required to pay his subscription any further. The Chit Funds Act does not cover this kind of chits.

Chit fund institutions are mostly located in urban areas where there is a concentration of the salaried classes. A study in 1973 showed that there were eleven registered chit fund institutions located in Pondicherry town.¹⁷ Most of the Chit Fund Companies operating in the town are only branches of companies with headquarters outside the Territory. Some local firms have also entered the field recently.

VII. Coins and Currency

The establishment of trading centres in India and the consequent necessity to enter into exchange transactions with the local people prompted the French Company to consider the issue of coins. In order to meet the exigency the Company is known to have resorted to fiduciary issues to effect payment to its suppliers and creditors on the one hand and attempted to issue coins on the other based on the value of the metal in direct link with the local currencies for local financial operations.

A mint seems to have been established in Pondicherry as early as 1700 for the purpose. The Pondicherry mint is known to have resorted to the manufacture of two types of coins, viz. the French type and the local type. The manufacture of French type of coins was started in 1700, while the native type began only in 1736,

In 1705, François Martin wanted to make use of the gold coins seized from the hold of the Dutch ship '**Phoenix d'or**' which was captured by the French in the battle of 13 January 1705 by Baron de Pallières. As French 'panams' were then not in circulation beyond the limits of Pondicherry territory, François Martin wanted to mint pagodas of the same type as were then current all along the Coromandel Coast under the name of 'Varahan'. Ten thousand pagodas bearing the *varaha mudra* (Avatar of Lord Vishnu) were coined.¹⁸

The minting of rupee coins, the most popular currency in India, also engaged the company's attention. Negotiations undertaken in this regard did not succeed for many years. On 26 February 1715, the High Command in Pondicherry wrote to the **Directeurs Généraux de la Compagnie des Indes** in Paris that thanks to the efforts of a Frenchman employed as a surgeon to a relative of the Nawab of Carnatic, permission for the minting of rupees in Pondicherry would be obtained soon. The Directors of the company in Paris directed the High Command in Pondicherry to start direct negotiations with the Nawab himself. The High Command wrote on 18 February 1721 that a Brahmin messenger had been sent to the Arcot Prince on such a mission.¹⁹ But it was several years later i.e., on 12 October 1736 that Pierre Benoit Dumas the Governor of Pondicherry, announced with legitimate pride the fact of his having secured the right of minting rupees in Pondicherry forever.²⁰ Anandarangapillai mentions that the receipt of the news was celebrated as a festival with gun salute and other festivities. Anandarangapillai further remarks that it cost a sum of Rs. 1,20,000 plus 8,000 pagodas by way of miscellaneous expenses to obtain this privilege. Out of the first mentioned amount it is said that Rs. 80,000, Rs. 25,000 and Rs. 15,000 were paid to the Nawab, his entourage and the treasurer Imam Saheb respectively.

The privilege of minting rupees in Pondicherry accorded by Emperor Mohamed Shah was communicated to Dost Ali Khan, the Nawab of Arcot. This was made possible through the good offices of one Goulam Imam Houssen Khar Bador alias Imam Saheb, the Treasurer and a relative of the Nawab of Arcot. The Imam had further helped the French by supplying them with the dies of Arcot Rupees. In recognition of his services and by way of ratification of the agreement entered into between the Imam Saheb and the French Government, the High Command accorded him a royalty of one piece

for every 1,000 pieces minted at Pondicherry.²¹ The value of Arcot rupee minted in Pondicherry was fixed at 100 pagodas for Rs. 320, and $7\frac{1}{2}$ panams for one rupee.

Apart from rupee coins, golden pagodas were also minted at Pondicherry for use in Yanam where silver rupees and 'dabou' coins minted at Machilipatnam were also in circulation. Tiny sea-shells imported from Maldives served as coins in petty transactions. Similarly the rupee coins and *panams* required for Mahe were also minted in Pondicherry.

In a subsequent letter dated 15 October 1739, Dumas reported that the rupees of the Pondicherry mint had gained currency in Bengal without any obstacle. With a view to eliminating some of the practical difficulties encountered by the Pondicherry rupee in other regions of Deccan, Dumas addressed a letter to Nizam-ul-Mulk, the Nizam of Hyderabad, requesting him to issue necessary orders for the unhindered circulation of the Pondicherry rupee in Bengal, Machilipatnam and Yanam. The rise of Nadir Shah and the fall of Delhi had delayed the reply from the Nizam. However, through the effective intervention of De Voulton, a French physician, serving under Imam Saheb, Dumas had obtained a reply alongwith three 'parvanas'. One was intended for the Nawab of Bengal, the second for that of Yanam and the third one for the Faujdar of Machilipatnam.²²

The original building housing the mint having been found inadequate, a new mint building was constructed in 1738. A sketch drawn up in 1743 and kept in the archives of the Ministry of Marine Affairs shows the facade and the interior arrangements of this building constructed at a cost of 5,520 pagodas. This building was completely razed to the ground by the British in 1761. It was reconstructed after the restoration of peace in 1763. According to another sketch drawn in 1741 and included in Abbé Guyon's *Histoire des Indes Orientales* (1744), the mint was located towards east on the northern end of the present rue Romain Rolland.²³

During the last British occupation of Pondicherry from 1793 to 1816 the Pondicherry mint did not function except during a short interval between 1802 and 1803. After the restitution of Pondicherry to the French in 1816, it was proposed to re-open the mint more as a matter of prestige than out

of any necessity. The Government of Madras and the Pondicherry Administration entered into protracted negotiations. The Government of Madras insisted that coins minted in Pondicherry should be of different specifications as otherwise the French would have to bear the responsibility for the purity of coins manufactured here. ²⁴ Specimen coins minted in Pondicherry were sent to Madras by the British Consul General on 12 June 1817, and on the same day, A. Millon de Verneuil, Director of the Pondicherry Mint wrote to the Government of Madras to tell that the following coins were being minted in Pondicherry :

1. One rupee coin (a tiny crescent was added to differentiate it from that of Madras).
2. One half rupee.
3. One double *panam*.
4. One single *panam*.
5. One half *panam*.
6. One *douddou* or four *caches*.
7. One half *douddou* or two *caches*.
8. One *cache* (64 of which made one *panam*).

The Director of the Pondicherry Mint further stated that the minting of gold pagodas with a crescent having the same assay and weight as the Madras pagoda (with a star emblem) had been suspended many years before the French Revolution (1789). The mint had since then made only pagodas with the emblem of three Hindu divinities which were primarily meant to meet the requirements of the textile trade in Yanam. He, however, added that the French might undertake the issue of such gold pagodas in the near future. ²⁵

According to a memorandum dated September 1818 the services of the Pondicherry Mint were thrown open to private parties who could bring '*piastres*' and silver articles and receive in return their value in coins minus the prescribed amount of duties. The right of melting, refining and stamping of silver and copper coins were given on contract to natives. These natives also bore the cost of fabrication. The Director of the Mint, however, issued the dies and checked the assay and the weight of the coins. He had under his orders an interpreter, an exchanger of money and four native clerks paid

by the Treasury. The Administration also furnished the steel required for the dies as well as the moulds of these coins. The expenditure on these items was, however, very small. Out of every 1,000 minted, the Administration collected Rs. 27 towards various charges as shown below : 26

	Rupees
(a) To the Treasury (overlord right) ..	10
(b) For Imam Saheb ..	1
(c) For the Brahmin <i>anica</i> r ..	1½
(d) For the contractors and workers of the mint ..	14¾
Total ..	27

In the case of *panams*, out of every 1,000 *panams* 20 were collected by way of charges as follows :

	<i>Panams</i>
a) Treasury rights ..	10
b) For the Brahmin <i>anica</i> r ..	2½
c) For the contractors and workers ..	7½
Total ..	20

The royalty of Imam Saheb (at the rate of 1 per Rs. 1,000) was paid till 1803. But after the return of the French in 1816, no member of Imam Saheb's family came forward to claim this right as there was no male descendant in the family. The royalty, therefore, passed on to the Treasury. The services of the Brahmin *anica*r (Supervisor) was also subsequently terminated and his functions came to be looked after by an interpreter who served on a fixed and moderate monthly salary. This right also (1½ per Rs. 1,000) passed on to the Treasury. 27

The manufacture of *panams* and *douddous* was subjected to restrictions and was even suspended sometimes depending upon circumstances. The manufacture of coins of lesser value, which did not have unrestricted currency as the (Arcot) rupees in British India, and which circulated only in the neighbourhood of Pondicherry, had necessarily to be restricted as their availability in excess of demand reduced their value and affected the interests of private parties as well as revenue officials.

In spite of the efforts made by the British to prevent the circulation of Pondicherry rupees (it went to the extent of melting all those found in Madras), the Pondicherry rupees strictly maintained their assay and weight with the result that it was preferred to the Madras rupee as well as other rupees of India which were of lower metal value. Merchants in Pondicherry, therefore, sent large consignments of the same to Mysore and Hyderabad. From 24 March 1817, i.e. the date of its reopening upto 1830 when minting of coins was temporarily suspended, the Pondicherry Mint supplied the local fiscal system with coins amounting to 1,18,372 francs. 28*

The Pondicherry Mint was forced to close down in 1830 following a decline in the minting of coins precipitated by the steps taken by the British to paralyse minting operations here. Even as early as 1817 the Madras Government had declared that Pondicherry rupees would not be accepted by British Treasury Officials. Moreover, the Madras Mint offered 219 Madras rupees for 1,000 piastres whereas the Pondicherry Mint could offer only 213½ Pondicherry rupees for the same quantity of piastres. Under these circumstances, the Pondicherry Administration was obliged to reduce gradually the royalty from 12½ per rupees 1,000 to 4¾ per rupees 1,000 which was hardly sufficient to meet the expenses of the mint, leading to its closure.

In the beginning of 1837 the Madras Government also suspended its minting operations following a decision (rescinded later) which abolished the Madras Mint and ordered the conversion of all piastres in Calcutta, thereby causing much hardship to trade. The Pondicherry Administration utilised this opportunity to resume minting of gold and silver coins in Pondicherry with effect from 1 March 1837. 29

The small denomination coins known as *kasu* were, however, issued in Pondicherry from 1 November 1836. The exchange rate of *kasu* with *panam* could not be fixed because it depended on the value of copper and its supply and demand. Hence the *arrêté* of 29 November 1836, fixing the exchange rate at 18 *kasus* per *panam* was repealed on 6 March 1839. As *kasus* started accumulating in the coffers of the Treasury, the minting of *kasus* was suspended with effect from 1 January 1840.

* Zay gives the total figure as 1,23,370 francs which is wrong.

The reopening of the Pondicherry Mint attracted a large quantity of silver in the month of April 1837 when it minted as many as Rs. 1,50,000. In fact the Pondicherry Mint derived a net profit of 1299 francs in the first year. But with the reopening of the Madras Mint soon after, the Pondicherry Mint's operation slowed down leading to its closure on 1 January 1840. ³⁰

With the suspension of minting operations, British coins became legal tender in Pondicherry. This restrained the circulation of Pondicherry *panams* and restricted the amount of small coins in circulation to the quantity supplied by the British Government. The quantity supplied was found too inadequate to meet the requirements of exchange and retail trade. Coins of smaller denominations were available only on payment of exchange commission for which there were coin exchangers in the town bazaar. With effect from 1 December 1853 both old and new *panams*, double *panams* and half *panams* were declared as legal tender in the French establishments at the rate of 48 *kasus* per double *panam*, 24 *kasus* per *panam* and 12 *kasus* per half *panam*. ³¹

Old and new *panams*, their multiples and fractions, bearing the mark of Gaullist cock and 'Lys' flower having become so worn out, resulted in the diminution of their intrinsic value causing much inconvenience in minor day to day transactions. Moreover, these coins in which the workers were paid their wages suffered loss in exchange transactions resulting in large scale complaints from them. Added to this, these coins had no currency at all in British India. They were not accepted, therefore, in transactions involving citizens of French and British India, resulting in hardship and complications. Hence it was ordered by the *arrêté* of 7 June 1871 that the *panams*, double *panams* and half *panams* of Pondicherry bearing the cock and 'Lys' flower symbol will cease to be legal tender in the French establishments within three months from the date of issue of the *arrêté*. Upto 31 December 1871, these coins were accepted in payment of revenue and tax dues. They could also be exchanged within the same time limit in the Treasury of Pondicherry and the sub-treasuries. At the end of each month, these demonetised coins were checked, counted, and stocked separately in vaults to be converted subsequently into rupee coins in the Madras Mint. ³²

While Indian rupees were legal tender throughout the Territory, the local branch of the *Banque de l'Indochine* also issued paper currencies of the denomination of one rupee, five rupees and fifty rupees under the authority of the French Government. These notes were in circulation only in Pondicherry.

The demand and supply of the silver directly influenced the exchange rate of the rupee. Thus, the exchange rate which remained stable till 1875, started to appreciate from 2.5 francs in 1875 to 2.05 francs in 1885.³³ However, the official exchange rate of the rupee in Pondicherry came to be fixed by the Presidential *décret* of 13 September 1884. With effect from 1 January 1885 the legal rate of exchange in the French possessions in India came to be determined by the commercial rate of exchange in the colony. In the month of November each year, the Governor of Pondicherry issued an *arrêté*, based on the proposal of the Treasurer after taking into account the average of the actual rates of exchange prevalent during the 12 previous months, determining the exchange rate.³⁴ The Presidential *décret* of 22 September 1890 repealed article 2 of the *décret* of 13 September 1884. At the end of each quarter the Governor was required to fix the legal rate of exchange on the advice of the Treasurer taking into account the actual rates of exchange. This rate of exchange fixed by the Governor was to apply for remittances through the Post Office. Whenever a major alteration in the exchange rate was deemed necessary and urgent, the Governor was authorised under special circumstances without waiting for the statutory time limit to alter the official rate of exchange in the manner indicated above.³⁵ The budget of the colony till 1895 was drawn up in francs. From 1896 onwards, the figures came to be shown in rupees to simplify operations necessitated by variations in the exchange rate of the rupee.³⁶

With merger, the Indian Coinage Act, 1906, the Reserve Bank of India Act, 1934 and the Currency Ordinance of 1940 were extended to the Territory with effect from 1 November 1954. With the extension of these Acts, Indian coins, one rupee notes and bank notes issued by the Reserve Bank of India formally became legal tender in the French establishments. By appropriate notification, the French Indian notes which were then in circulation was also allowed to continue to be legal tender upto 30 April 1955. The public were therefore, called upon to exchange these notes for Indian currency at the Imperial Bank of India, Pondicherry before the expiry of the six-month period.* From then onwards all French currencies ceased to be in circulation.

* La Gazette de l'Etat, dated 1 November 1954, p. 34 vide Press Communiqué.

VIII. Courses of trade

The commercial history of Pondicherry for almost two centuries between 1675–1875 was closely linked to the activities of the French trading companies. Even as early as 1604, Henri IV had given to a company the exclusive privilege of trading with India for fifteen years. The company, however, proved a failure. Five more companies organised between 1611 and 1652 also did not fare well. The famous “**Compagnie des Indes Orientales**” was organised in 1664, by absorbing the **Compagnie de Chine** which was formed in 1660. The **Compagnie des Indes** was formed in 1719 by merging the **Compagnie des Indes Orientales** with the **Compagnie d’Occident** (John Law’s Company). After 50 years its privileges were suspended and the company was dissolved in 1770 and trade with India was declared free. A new company, styled as **Compagnie Nouvelle des Indes** was established in 1785. Although its privileges were revoked after five years, it was re-established as a joint stock company and extended in one form or other until 1875.

It was François Martin who laid the foundation for the growth of trade and commerce in Pondicherry. Within six weeks of his taking possession of ‘Pasquinambat’ (Pakkamudiyampet), 150 pieces of cloth were being manufactured every month by weavers, who were granted full exemption from taxes and duties. By 1676, the godowns of the company had a stock of over one million francs worth of textiles. A unique feature of the trade was that the soldiers recruited by François Martin were allotted cultivable lands and were encouraged to settle down and carry on weaving. These weavers, besides ensuring the defence of the town, also contributed to its economic prosperity.

Muslin, coloured cloth, cotton cloth, silk wares and brocades were manufactured and these formed a substantial portion of the exports. Liquor, linen and mineral water were imported from France. Commerce grew up gradually. Painted cloth, pepper, cotton, silk and *saltpetre* formed the chief items of export. The weekly fair held on Tuesdays attracted thousands of people. Trade was carried on through cash transactions. Credit sales were also popular. These markets were very active in spite of the fact that they were of recent origin.³⁷

Colbert's death in 1683 came as a great blow to the Company which was compelled to suspend its trading operations in India. The sale of painted (coloured) cloth from India had crippled the French textile industry in Lyon and such imports were banned in 1685. The very next year the French Government prohibited the importation of printed cloth from India in the interest of home manufactures. The import of silk and muslin was also restricted in 1702. The trade of spices was relatively less affected. Though coffee was available for import into France, it did not command a wide market as the coffee habit had not yet taken roots in Europe. In 1709, the import of all kinds of cotton goods from India was prohibited marking the final victory of 'protectionism'.³⁸

In 1715 the Company's privileges were extended for 10 years. Subsequently (1719) however, this Company was amalgamated with Law's *Compagnie d'Occident* under the new name of *Compagnie des Indes*.³⁹

When de La Prévostière assumed charge as Governor of Pondicherry (1713) he found the fortifications and godowns in a very bad shape.⁴⁰ Coins were scarce and the products brought by ships could not be sold easily.

The *arrêté* of 23 March 1723 strengthened the capital structure of the company. From 1726 trade in Pondicherry gathered momentum. Apart from exports, trade with the various parts of India also developed. The Machilipatnam Depot was soon revived. With the recapture of Mahe in 1725 the Company was assured of a lucrative pepper trade. As much as two million pounds of pepper were shipped from here every year. The British Company at Calicut (Kozhikode) did all in its power to destroy the settlement which included an attempt to set fire to the godowns in Mahe. But it survived all the attacks and remained with the French. From 1725 to 1759 the company sent out to India an average of 20 vessels a year, while vessels returning numbered 15 on an average a year. During the period 1747-48 the company spent 27,24,26,392 livres for the purchase of goods in India which were sold in France for 53,20,00,000 livres earning a net profit of 25,30,69,631 livres.⁴¹ Trade in Pondicherry and other establishments like Chandernagore and Mahe grew up steadily both in terms of value and quantity. By 1740, as many as forty vessels of the company were engaged in the trade with India. Gold was transhipped to Chandernagore which had by then ceased to be a village.

Silk products were exported from Chandernagore. Mahe exported pepper, sandal and teakwood, saffron, etc. It must be noted that trade between the various establishments was not objected to by the company which enabled it to expand its business.

Trade with the interior country, which was hitherto the preserve of the employees of the company, was thrown open to all. The local commerce began to yield huge profits.⁴² As trade and commerce developed, cultivation of crops in the districts was greatly encouraged.

The Seven Years War, however, dealt a severe blow to the company. An effort was made to retrieve the situation by the edict of 1764. But the attack on the company by Abbé Morellet, a noted economist of the day and the public condemnation sealed the fate of the company. In the midst of some encouraging indicators of growth, the Government of France took a step which seriously cut down the budding prosperity of the town. The monopoly rights of the French Company were suspended by the decree of 13 August 1769. However, the edict of 1770 accorded the right of free navigation and commerce east of the Cape of Good Hope to all Frenchmen. This edict was subsequently withdrawn, as France soon felt that monopoly of trade was necessary, leading to the formation of the second "**Compagnie des Indes**" which substituted the former company, the rights of which had remained suspended. This step, in turn, affected the trade within India, thus choking up a highly remunerative export business. This move considerably alienated the feelings of the local traders and created discontent among the whole population.⁴³

The mini revolution in Pondicherry also had its impact on trade and commerce. Trading activities remained paralysed due to the disturbed political situation. A large number of local craftsmen, weavers and dyers migrated to Madras. Production of cloth having ceased, money became scarce. Cultivation was abandoned by peasants, many of whom left the territory for good. Even for such of those who remained, there were no jobs.

When the French took over on 4 December 1816, commercial activities in Pondicherry were almost at a standstill. The nine-year rule of Comte Dupuy witnessed considerable changes in administration and improvements in the town, which in turn led to an increase in population and trade. The period of Governor de Richemont was significant in that he encouraged the

textile industry and agriculture and established the Central Bazaar. In 1829, the first modern spinning mill was established. A weaving section was added to it in 1838. Eleven years later, the Chamber of Commerce came into being. The Second Empire extended its sway over territories like Algeria and Guinea in Africa. Cochin-chine (South Vietnam) and Senegal became protectorates of France. All these developments gave a much needed boost to the export trade of Pondicherry. The textile industry was encouraged with subsidies. Under another scheme, textiles of Pondicherry were issued Certificates of Origin to enable their entry into French colonies, particularly Senegal.

Following the Free Trade Treaty of 1860, many countries adopted the policy of free trade and the question of obstructing trade between the French and British territories lost its relevance. But the textile industry of Pondicherry which was unable to compete with the products of Belgium, showed signs of decline and had to be closed down in 1870. The years from 1860 to 1871 witnessed a decline in the export of coconut oil owing to competition from Ceylon (Sri Lanka) and Malabar coast. The export of coconut oil which constituted the major component of export trade of Pondicherry was ruined.

From 1872, however, trade showed signs of revival with the growth of ground-nut export. But following the economic crisis of 1880, France again resorted to a policy of protectionism. With the passage of the Indian Tariff Act in 1894, the British Government decided to impose a 15 per cent customs duty on all goods entering British India. The commercial prosperity was once again hampered. Another period of bad trade began by about 1890 and continued with some variation upto 1900. It may also be mentioned that with the extension of the French protectorate to Cochin-chine in 1861, Cambodia in 1863, Annam in 1882, Tonkin in 1885 and with the union of all these countries into what came to be known as Indo-China in 1897, Pondicherry became the halting point for ships on their route to the Far East. This also opened the way for many Indians to Indo-China. The pier was built in 1866, and the Indochina Bank was opened in 1875. By this time, ground-nut emerged as the chief item of export. In 1889 alone 30 ships touched Pondicherry to lift cargoes of ground-nut. It is further evident from the movement of ships that the Pondicherry port also attracted the British as Pondicherry was then a free port. For example, in 1877 British vessels brought goods worth about 3.4 million francs, while French vessels brought goods worth only about 2.7 million. However, the value of goods exported in French ships amounted to seven million francs while goods exported in British ships amounted to three million francs.

The sea-borne trade between 1860–1900 showed a large excess of exports over imports as evident from the following statement :

(Value in francs)

Year			Imports	Exports
1860	..	..	6,318,235	25,995,705
1870	..	..	5,253,409	13,831,923
1880	..	..	7,970,068	25,441,664
1890	..	..	4,637,957	17,099,046
1900	..	..	4,029,536	10,713,834

The commerce was very largely in the hands of French Companies, many of them long-standing. The British India Steam Navigation Co. and the Standard Oil Co. were the most important foreign companies operating here. About this time Englishmen also came to Pondicherry to attract deposits for their banks and to canvas business.⁴⁴ Domestic commerce was very insignificant during this period. A large proportion of the local products was consumed within the establishments. Among natives, Vysyal chetties were the most active in the field of business.

The years 1901 to 1904 were prosperous; there was a slight decline in 1905, 1906 and 1907. From 1908 to 1914, the French establishments participated in the general expansion of Indian sea-borne trade and had a larger foreign trade than at any other time in their history. Ground-nut export consisted of stripped nuts or with husks. The proportion of nuts exported in shells depended largely on the availability of decorticating machines which could not keep pace with the expansion of trade. The value of export of ground-nut in 1910 amounted to 28 million francs as against 11 million francs of cotton, although the major portion of the ground-nut came from the District of South Arcot. Pondicherry grew into an important emporium for ground-nuts, grown not only within the Territory but also in British India. Special facilities were given by the Bank of Indochina for ground-nut export. In 1913, the export value of ground-nuts in husks was 2.5 per cent of the total, but a supply of decorticating machines, manufactured locally reduced the proportion in 1914 to 0.9 per cent of the total. The export of ground-nut to Marseille

was handled mostly by European merchants who lifted ground-nut from Cuddalore and Panruti. The increase was very marked in the year before the outbreak of war chiefly in terms of prices obtained, for it did not reflect either in the quantities exported or in the tonnage figures. The price of ground-nuts, the most important item of export, was very high in 1913.

Next in importance to ground-nut was the export of cotton fabrics, the value of which was 7,165,720 francs in 1906, as much as 7,341,367 francs in 1913 and 6,365,182 francs in 1914. The export of ground-nut and cotton fabrics was made almost entirely from Pondicherry, those from Karaikal being insignificant.

Two other important exports—rice and fish—were made from both the ports and there was a small export of fish from Mahe and Chandernagore. The export of rice increased in value from 7,816 francs in 1906 and 10,266 francs in 1907 to 1,848,053 francs in 1913 and 1,232,266 francs in 1914. Rice was lifted chiefly from Karaikal which exported an average of 7,113 bags in the years 1909–13 against an average of 63 bags from Pondicherry. The quantity of rice exported from French India in 1913 was 6,981 tonnes. The export of salt fish rose in value from 24,018 francs in 1906 to 104,208 francs in 1907, owing to a large demand from Colombo and the Straits Settlements. The value in 1913 was 80,149 and the quantity 356 tonnes. The other items of exports were bone powder, cocotene, pottery (from Karaikal), ground-nut oil, oil, indigo, skins and hides. The export of pottery from Karaikal port increased from 1874 francs in 1906 to 11,733 francs in 1907 owing to demand from Ceylon. It reached 19,542 francs in 1913. Small quantities of coconuts, tamarinds, onions, tannin, dyes, castor oil, coconut oil, chillies, coffee, coriander and gingelli were also exported. Exports were mostly destined for France and the French colonies. Apart from the French destination, it was confined mostly to Britain and British Colonies.

The most important items of imports were cotton, arecanuts and petroleum. The import of cotton was confined to Pondicherry, arecanut to Pondicherry and Karaikal, whereas that of petroleum to Karaikal which served as a depot for the surrounding districts. Smaller imports included wines, spirits and other liquors, coal, cotton thread, jute bags and grains. A large proportion of the import trade was with the British Empire and a small proportion with France and the French possessions,

The trend of sea-borne trade in the early years of the century will be evident from the following statement :

(Value in francs)

Year			Imports	Exports
1900	..	..	4,029,536	10,715,834
1905	..	..	6,356,207	27,283,997
1910	..	..	8,376,531	37,446,013
1911	..	..	8,618,302	37,988,286
1912	..	..	9,031,780	37,218,209
1913	..	..	10,837,115	43,720,095

The foreign trade was almost entirely concentrated at Pondicherry, which was the only real trading centre. The export from Karaikal was about one-ninth of the total sea-borne trade. Trade at Yanam and Mahe was insignificant.

Between 1913 and 1916 the export-import trade had declined to less than half. Export of goods was more affected because of the war in Europe as the submarine war in the Mediterranean had made the export trade very risky. In passing it may also be mentioned that the year 1915 witnessed the conflict between the Chamber of Commerce and the **Banque de l'Indo-Chine** regarding the rate of exchange and bank discount (rate of pledge) which according to the Chamber was very excessive.

After the war, the export of ground-nut once again gained momentum. But in the meanwhile, a few oil mills started to operate in Pondicherry. The tannery industry also grew up. Hides and skins came to be exported to France, Japan, and the British ports in South-East Asia. Items of handicrafts and pottery were exported to Singapore and Sri Lanka. Handloom weavers who numbered about 4,000 in 1878 declined to about 800 in 1921. It was about this time that local tradesmen called for the abolition of customs barriers and preferential treatment for the products of Pondicherry.* But the British further increased in 1924 the customs tariffs introduced in 1894. The entry

* This is understood from an anonymous tract,

of local products into British India became difficult, whereas Pondicherry being a free port, foreign luxury items and liquor flooded its market, leading to large scale smuggling. Even the free trade policy followed by the French India administration did not help resolve the internal economic crisis. In order, however, to set right the situation, France agreed to hand over to Pondicherry the salt subsidy it had been receiving for more than a century, to meet Pondicherry's budgetary deficit. This came as a windfall and a vast programme of development was undertaken to strengthen the economic infrastructure of the establishments. The programme of action was delineated in the famous "**Programme des Grands Travaux pour le Developpement de l'Outillage Economique et Social dans les Etablissements Français dans l'Inde**", which appeared in 1937. The programme envisaged the balanced growth of both the rural as well as urban sector and sought to remove disparities between the two. The World War II however brought to a halt the implementation of the schemes. During the inter-war period, particularly between 1917 and 1937, the export trade showed a marked decline, while import trade enjoyed a boom. The decline in the export trade was linked to the economic crisis of the thirties which engulfed France in 1931. The export trade showed signs of improvement during 1936-37 as amplified by the following statement :

(In tonnes)

Year			Export	Import	Total
1932	..	..	40,354	9,552	49,906
1934	..	..	44,880	24,044	69,824
1936	..	..	72,631	19,364	91,995

The improvement in the trade witnessed during 1936-37 did not last long. With the World War II communication between Pondicherry and France was once again cut off. Following the capitulation of France in June 1940 even the navigation was suspended. However, following the negotiations between the French India Administration and the British Government, a Customs Union was established with British India on 28 January 1941. As a result of the Customs Union, the textile products of Pondicherry came to enjoy a ready market in the vast British India.

The trend of foreign trade in the forties would be evident from the following statement* :

(In 1,000 rupees)

Year			Imports	Exports	Total
1940-41	..	..	28,16	62,47	90,63
1941-42	..	..	1,95	22,29	24,24
1942-43	..	..	21	7,28	7,49
1943-44	..	..	1,89	2	1,19
1944-45	..	..	8	15	23
1945-46	..	..	14	Nil	14
1946-47	..	..	64	—	64
1947-48	..	..	1,30	22,31	23,61
1948-49	..	..	3,76	52,98	56,74

Soon after the war, India was assured of Independence. It was felt that the French would also follow suit. The trading community now faced a dilemma. The presence of the French appeared to them favourable. But they would be able to make hay only if the vast Indian market would remain open to them. Their prosperity, in other words, depended on India. With the abolition of Customs Union in 1949, customs barriers were once again placed around Pondicherry. The economy of the territory was subjected to a great deal of pressure.

In the early fifties the bulk of the imports consisted of luxury goods of French or continental origin such as silk, artificial silk, piece goods, diamonds, watches, gold, silver, perfumes, playing cards, motor cars, liquor, etc., the import of which was either restricted or totally banned by the Import Trade Control in India. A major portion of these imports found their way to the Indian market across the border. Smuggling was less during the period

* The Imperial Gazetteer, p. 107.

of Customs Union Agreement between 1941–1949. Even on the export side, there used to be a large scale export of various commodities which were either restricted or not normally allowed for export under the Export Trade Control Regulations obtaining in India, such as peacock feathers, copra, ground-nut kernels and ground-nut oil. There were also exports of cotton mill products of cheaper varieties suitable for African territories. Besides these items, exports consisted of cheap varieties of mill cloth like shandoras, etc., to French Overseas Territories. There were also some exports of cotton yarn, other cotton manufactures and cotton waste mainly to the United Kingdom.

The early years of the fifties also witnessed an unhealthy trend in the internal trade of paddy. Merchants who brought rice from South Arcot sold them at a high price in French India. French India was equally poor in pulses. South Arcot also suffered a deficit. The merchants in turn re-exported grain to South Arcot. The effect of the manipulations of Pondicherry traders was felt in Cuddalore and Villupuram. The Indian Government could not ignore these developments. The situation became worse when to this was added contrabandism of gold and precious stones.

Pondicherry slowly developed into an international trading centre. Gold which fetched a much higher price in India than in French India was taken to the frontier in larger quantities. Gold and diamond were imported to Pondicherry through official channels paying customs duty which was nominally increased subsequently to improve the revenues of the Territory. These were smuggled to the Indian Union. In turn, more Indian rupees from Pondicherry reached Hong Kong and the Persian Gulf wherefrom gold was brought.

During 1951–52 alone, 15 tonnes of gold were landed in Pondicherry i.e. as much as 25 times of what was imported during 1949–50. While the import of gold and diamonds during 1949 may be valued at 40 million francs, the very next year it reached 145 million francs. This contraband added to the depreciation of the rupee. Since January 1952 the territory faced a grave monetary crisis. While there was an outward semblance of prosperity, there was a scarcity of Indian currencies. Indian currencies became very scarce while the value of French currencies declined. Sometime by the end of 1952, France decided to stop the import of gold. Nevertheless, Pondicherry witnessed a scarcity of cement and essential commodities. It was in the midst of these crises that the French agreed to *de facto* merger,

Prior to merger, the Administration exercised control over foreign trade through a system of allotment of foreign exchange. Importers were called upon to present their applications to the '**Bureau des Affaires Economiques**' through one of the three Foreign Exchange Banks functioning in Pondicherry, seeking permission to import commodities required by them. The foreign exchange was provided on the principle of 'first-come-first served', within the ceiling fixed for French Indian Territories by France. In this way '**autorisations**' and attestations were issued by the said Bureau. These two documents alone could be considered as near equivalent to licences issued nowadays under the Indian Import Trade Control Regulation. In certain cases, foreign exchange was provided by the intending importers from their own private sources and these operations were known as 'Open Market Transactions'.

The French India's import and export policy was always geared to the overseas economy of France. The trend, volume and direction of imports and exports were determined by the economy of French overseas territories. The trade was mainly directed towards Saigon and the French possessions in Africa.

After merger : The Import and Export Control Act, 1947 was extended to these establishments with effect from 1 November 1954. Following its extension, imports into and exports from these establishments came to be regulated in accordance with the provisions of the said Act. A Controller of Imports and Exports for the French Establishments was appointed. As regards orders placed outside the establishments and finalised through the grant of a licence by competent French authorities in accordance with the laws and regulations in force prior to 1 November 1954, licence holders were advised to apply to the Controller of Imports and Exports for validation of licences held by them. The import of gold and silver was banned. It was also not allowed to be exported to the rest of India.

Import and export licences were granted in accordance with the policy announced by the Indian Government from time to time on an all-India basis. Pondicherry being comparatively an under developed area, additional licences were granted especially with a view to compensating the merchants for loss in turn-over in business due to the imposition of the Import Trade Control Regulations. Since *de facto* merger the quantum of imports licensed went on increasing until it reached its peak during January—June 1956 when

licences to a value of Rs. 2.25 crores were issued. This was done also with a view to ensuring that the application of the Indian Import Trade Control did not adversely affect the quantum of trade carried on through the Pondicherry port. As for imports of consumer items like soap, perfume, silk fabrics, liquor, etc. from France, they were allowed to import to the extent of 100 per cent of the imports irrespective of the policy for the items under the Indian Import Trade Control.

A Special Additional Licensing Scheme was introduced for the first time during the January—June 1955 period. Under this scheme, all those who produced satisfactory evidence of past imports were enrolled under the Special Additional Licensing Scheme upto the January—June 1956 period when half-yearly licensing under the scheme reached the level of Rs. 1.5 crores. On account of the unfavourable foreign exchange position and adverse criticism from other parts of India, imports were not allowed at the same level since July—December 1956. Hence in the import policy for the July—December 1956 period a cut of 33-1/3 per cent was made on the grant of Special Additional Licences for this area. During the July—December 1956 period, Special Additional Licences were granted only to the extent of 66-2/3 per cent of the licences issued for the January—June 1956 period. In view of the growing need of foreign exchange for the various development schemes sponsored under the Five Year Plans, these Special Additional Licences were granted from the January—June 1957 period upto the April—September 1959 period to the extent of 10 per cent of the licences granted for January—June 1957 period within an overall ceiling of Rs. 15 lakhs per half-year. The Special Additional Licensing Scheme was of an *ad-hoc* character and it was renewed every half-year subject to revision. Similarly specific Special Additional Licences were also granted for imports from France, irrespective of the policy for the items after applying the cuts on par with the special additional licences.

Following persistent representations from trade circles, the Government of India decided to change the Special Additional Licensing Scheme into a quota system with effect from the October 1959—March 1960 period subject to the condition that imports made under the Special Additional Licences would be admitted for quota only to the extent of 50 per cent of past imports. This was done in order to provide some relief to some categories of importers. Replacement of the Special Additional Licences by the quota system raised the import bills of Pondicherry by Rs. 25 lakhs per half-year. In spite of this

rise in the foreign exchange commitment, special additional licences were issued on repeat basis upto the April—September 1960 period and thereafter it was discontinued, as the items concerned were highly restricted and there was no commitment of any type on the part of the Indian Government to allow imports from France on a preferential footing. This concession was allowed in the beginning just to ensure that the long trade association of Pondicherry with France was not suddenly dislocated by the introduction of Indian Import Trade Control. Imports made under the Specific Special Additional Licences were admitted for quota provided the item was licensable then, subject to the same conditions as were applicable to quotas fixed on imports made under other Special Additional Licences.

The main items of imports under the Special Additional Licences were electrical instruments, motor starters, house service meters, betel-nuts, cloves, chemicals, drugs and medicines and other consumer items imported in terms of the quota system introduced since the October—March 1960 period.

On the export side it may be stated that there was not much of a change in policy. Cotton piece-goods produced by the three textile mills formed the main export item from Pondicherry. Export of cotton piece goods was decontrolled. The other items of export were ground-nut oil and onions; but these items were exported by Pondicherry exporters through other ports like Madras and Nagappattinam, and such exports were few and far between. Lately there have also been some exports of art silk fabrics from this port under the Exports Promotion Scheme, a portion of the exported goods being replaced by the issue of an import licence for art silk yarn forming the main component of the exported commodity.

A large number of small-scale industries were engaged in the manufacture of electrical instruments, railway block instruments, cable boxes, soap, perfumes, stapler pins, buttons, etc. These small-scale industries were granted licences for the import of machinery, components and raw-materials required by them. The requirements of small-scale industries engaged in making interlocking switches and other electrical appliances, soap, aerated waters, matches, etc. were also taken care of by the issue of import licences for raw materials and components.

Some co-operative societies were granted import licences for certain consumer item, viz., milk food for infants, packing and wrapping paper, etc.

Export licences have also been granted to intending exporters and co-operative societies for onions and dried chillies.

Of the four coastal towns, only Pondicherry and Karaikal are open to foreign trade while Mahe is open only to coastal trade. No exports are however carried out through the ports of Karaikal and Mahe.

IX. Customs and Central Excise

The system of levying customs duty to regulate the movement of goods across the borders was in force in Pondicherry from very early times. A Marathi document dated 10 January 1740 from the Raja of Thanjavur refers to the exemption from payment of customs duty being granted to Gopala Mudaliar. Two other similar documents exempt the entourage of Governor Dumas from the payment of customs duty.

The out-going Governor Law de Lauriston reports in detail the customs agreements entered into with the Nawab in his note dated 9 January 1777 to Governor Bellecombe. Though the agreement was entered into with the Nawab of Carnatic, the British were the driving force for the enforcement of these customs regulations which were decidedly to the disadvantage of the French. Each customs post was manned by a clerk, one peon and two or three sepoys. Disputes over the payment of duties at these customs posts were frequent. Sometimes the customs staff were assaulted by the travellers. Law de Lauriston recommends the abolition of customs by payment of certain presents to the Nawab.⁴⁵ With the replacement of the Mughal and Mahratta powers by the British by the end of the XVIII century, land customs passed into British hands.

After the final restoration of Pondicherry to the French in 1816, the question of imposing certain restrictions on the movement of goods across the boundary came up for consideration. The Madras Government issued orders that with effect from 1 March 1817, all articles exported from any of the French establishments to the Madras Presidency were liable to double duty, as were also all articles of external trade or materials fit to be made into such articles, exported from British territory to any of the French establishments. All articles fit only for the internal consumption of the French establishments were liable to a single rate of duty of eight per cent. Food grains,

livestock and all other provisions were liable to no duty, but food grain exported by sea was liable to a three per cent export duty. Subsequently, orders were issued that this three per cent export duty should be levied on all rice exported to French establishments and drawback granted on such quantity as was consumed there. On a representation, however, being made by the French Government on this subject and on their consenting to furnish, every three months, a statement of all articles received from British territory and afterwards exported, the indulgence of a free export of rice by land was again granted as a temporary measure, to be continued only as long as export of rice from Pondicherry was inconsiderable. This indulgence was however confined to the territories around Pondicherry by the Government order of 9 June and 14 August 1817. Towards the close of that year and on the French Government having accepted certain propositions made to them by the English Government with regard to the discontinuance of the manufacture of salt in the French establishments the Madras Government agreed to the following concessions in respect of customs duties on articles passing the frontier to and from the French establishments :

(1) All livestock and articles of provisions (food grains of all sorts included) in quantities actually and *bona fide* required for consumption in Pondicherry and other French settlements to be allowed to pass the frontier free of duty.

(2) All articles other than food grain and provisions such as local cloths, drugs, curry stuffs etc., to an extent actually required for consumption in the French settlements to be subject to a duty of eight per cent.

(3) All articles imported at any British port, which have paid full duty as required by regulation, to be allowed to pass free of all further duty into the French establishments.

The foregoing concessions, however, were to be confined to the actual requirements of French establishments while all articles of export and import trade were still liable to duty.

On the passing of the Land Customs Act (VI) of 1844, and the abolition of the transit duties, the Madras Government, on a reference from the Collector of South Arcot, decided that the privilege hitherto conceded was to be

continued to all French establishments on the French Government giving a guarantee for the payment of the usual export duty on all food grains exported from here.⁴⁶

Imports into and exports from British territory were to be carried on only through certain prescribed routes. Along these, on the frontier, were land customs posts called *sayer* stations or *chaukis* at which the duties were collected. The rates of duty were the same as on the corresponding imports or exports by sea. Besides, there were certain outgates, at each of which was posted a peon whose duties were to prevent smuggling and to see that traffic passed only along the authorised routes. There were eight *sayer* stations and the same number of outgates. Going around from north to south, the former were situated at :

Kottaikkuppam	Kandappachavadi
Karuvadikkuppam	Kandamangalam
Mortandi chavadi	Thookanambakkam
Valudavur	Madalapathu

There was also a *chauki* at the frontier railway station at Kandamangalam and a searching station at Periya Canganamkuppam at the northern end of the bridge over the Ponnaiyar at which passengers and goods coming from Pondicherry through Madalapathu were re-examined.⁴⁷ Special rules governed the import of articles by rail and by port. Rice and paddy were usually liable for export duty when sent out of British territory, but concessions in the case of articles required for local consumption were granted. Rice and paddy could be brought to the French establishments duty free as long as the French Governor gave a guarantee for the payment of the ordinary export duty on all food grains exported from Pondicherry by sea to foreign ports. It was customary to allow arrack and toddy to be moved from one French village to another French village through the English territory covered simply by a pass issued by a Village Officer of French India. However, from 1 July 1875 it was notified that liquor, arrack and toddy passing through any part of English territory would be confiscated unless covered by an English permit. This is said to have led to a remonstrance on the part of the French Government. On 3 October 1876, the old procedure was revived and French passes were again recognised.⁴⁸

The passing of the Indian Tariff Act in 1894 was the next important development that affected the commercial relations which the inhabitants of French India had with those of British India. The Chamber of Commerce of Pondicherry echoed the grievances of the local merchants and proposed a common sea-customs with the consent of the British. This matter was represented to the French Government on 23 April 1896. On 1 September 1896 the Minister for Colonies replied that the creation of sea-customs could be sanctioned only by Parliament and that it might object to it. Instead of the proposed measure, he suggested the collection of *octroi* at the port.

The matter was then reviewed by the Chamber of Commerce which in its session of 26 October 1896 passed a resolution requesting the local Government and the Government of Madras to study the problem and to hold negotiations. There was a stalemate for several years. In 1901 the Government of British India consented, on certain conditions, that parcel packages for Pondicherry forwarded by steamer from the French colonies via Cuddalore might pass through the British Territory without being inspected or paying customs duties. In 1904 a small duty was levied on all wines and spirits entering Pondicherry, but it did not affect the quantities imported. The customs and tariff at Karaikal, Yanam and Mahe were similar to those in force at Pondicherry.

During the World War I period, Pondicherry experienced a shortage of food grains which prompted the French India Administration to take up the matter again. Discussions were held secretly between the Governor of Madras and the **Chef du Service des Contributions**, Pondicherry. Proposals were put forward by both sides. However, finally the French had to agree to the establishment of sea customs as proposed by the British Government. An agreement is known to have been reached in 1918 between the French and British Governments regarding the abolition of customs around Yanam.

As per the Customs Conventions dated 10 October 1922 concluded between the British and the French, the British India Government agreed to remove all customs barriers installed around Pondicherry and Karaikal and to stop collecting customs duty on goods entering British India from Pondicherry and Karaikal.⁴⁹ On the other hand, the French India agreed to establish customs posts in the ports of Pondicherry and Karaikal and to collect the same

duties as those collected in the ports of British India. Imports from France however enjoyed the same benefit as those enjoyed by imports from England to British India. The total collection made from the customs posts were to be shared equally every year by the British and French India Governments.

Following World War II, a Customs Union was established in 1941 under which, in return for the payment of an annual subsidy of Rs. 6,20,000 by the Government of British India to the French India authorities, French India authorities handed over the customs jurisdiction over the area to the Government of British India and for purposes of import-export and customs regulations, French India became virtually a part of India. This agreement could however be terminated on a year's notice. In March 1948 the Government of India gave one year's notice to terminate the Customs Union, as according to it, conditions had changed since the agreement was made. Thus the Customs Union Agreement was terminated with effect from 1 April 1949, and necessary customs and import and export regulations applicable to all other foreign territories came to be applied to the French territories.

There was further tightening of land customs thereafter due to large scale smuggling of gold, diamond, watches and playing cards which affected the Indian market to a great extent. New Delhi appealed to Paris to advise the French Indian Government to put a stop to smuggling. The French India Administration responded by slightly increasing the import duty which helped only to increase their own revenue without affecting imports. The Government of India took steps to tighten the customs cordon. Customs rules however came to be relaxed subsequently with a view to avoiding undue suffering to *bona fide* residents. Smuggling was rampant both ways; essential commodities were imported on the sly from the adjacent districts for exporting abroad and large amount of gold, diamonds and manufactured articles from abroad and a good portion of them were smuggled into Indian territory by-passing the customs.

With *de facto* merger a Collectorate of Customs and Central Excise started functioning with headquarters at Pondicherry from 1 November 1954. It functioned as a combined unit for purposes of administration of Customs and Central Excise and the Collector functioned both as the Collector of Central Excise and as the chief customs officer. He was assisted on the

Central Excise Wing by a Superintendent of Central Excise and on the Customs side by two Appraisers. Each of the four regions constituted a Central Excise Range and each range was in charge of an Inspector assisted by a sepoy. Pondicherry and Karaikal were declared as warehousing ports open to foreign trade, while Mahe carried on coastal trade with customs port as defined under section 12 of the Sea Customs Act, 1878.

Soon after merger, the Intelligence Branch maintained a watch on the trade transactions and stock disposition of goods imported till 1 November 1954. It was generally engaged in the collection of information on the movement of such goods with the object of preventing their clandestine removal out of the territory.

A Customs Advisory Committee as approved by the Central Board of Revenue was constituted at Pondicherry for all the ports under the jurisdiction of the Collectorate.

With effect from 1 July 1963, the Collectorate reverted to the Centre with the passing of the Government of Union Territories Act, 1963. With the decline of import and export trade, the Collectorate was converted into a Divisional Office and attached to the Collector of Customs and Central Excise, Madras since 1968. However, with effect from 1 April 1971, the Pondicherry Customs and Central Excise, Divisional Office was placed under the control of the Collector of Central Excise, Madurai. The Chamber of Commerce took up the issue with the Government of India. As a result, the *status quo ante* was restored.

Subsequently, the Union Finance Ministry attached the Pondicherry Port (Customs) to Nagappattinam Division, thus bringing it under the control of the Madurai Collectorate. The Chamber of Commerce in a memorandum represented that there was an Assistant Collector of Central Excise at Pondicherry who could look after the customs. The memorandum pleaded to attach the Pondicherry Customs work to the Assistant Collector, Central Excise. Consequent on the formation of the Cuddalore Customs Division, the Pondicherry Port is attached to the Cuddalore Division instead of the Nagappattinam Division with effect from 1 April 1975 under the Madurai Collectorate.

X. Centres of trade

The extent of the area being small and the British having placed several restrictions from time to time on the movement of goods across the borders, the French establishments were left with little scope for growing into major trade centres. It was seen that till merger these establishments were separated from the rest of the country by a stiff customs barrier. This limitation together with the lack of adequate demand and resources hampered the growth of market centres. The removal of the customs barriers must enable the Territory to envisage a certain measure of improvement in its trading centres. The few market centres that have developed in the territory cater only to local requirements.

Until very recently, no systematic attempts were made either to identify the potential market centres and market places in the Territory or to plan out their development. In 1973 however, the Directorate of Pilot Research Project in Growth Centres carried out a study to identify such centres in Pondicherry region. According to this study, the marketing system in Pondicherry region is 'weak and unorganised'. Market-yards are found to be located in very limited space or on road-sides. Producers suffer loss due to absence of a ready market in nearby places. In the opinion of the Directorate, therefore, there was great scope for launching a market development programme formulated by marketing experts and market management specialists, by making use of the existing and potential market centres and by improving the physical facilities for marketing in the twenty-one market places.⁵⁰

Pondicherry and Karaikal towns serve as market centres for the respective regions. Both Mahe and Yanam have not developed into market centres. While Kakinada and Rajahmundry serve Yanam, the nearby towns of Tellicherry, Kozhikode and Cannanore serve Mahe. The Directorate of Pilot Research Project identified Ariyankuppam, Villiyanur, Tirukkanur, Muttiyalupettai, Madagadipattu, Tavalakuppam Kariamanikkam and Gandhinagar as market centres in Pondicherry region.* These centres serve a number of surrounding villages. In addition to house-hold provisions, items such as textiles, agricultural implements, oil, hardware, etc., enjoy a market in these places.

*Market centres are defined as places where the rural population purchase their daily necessities and sell their produce throughout the day.

The Directorate further identified 21 market places in the region. They are as follows :

- | | |
|----------------------------|--------------------|
| 1. Kusappalaiyam | 12. Ariyur |
| 2. Laspettai | 13. Gudappakkam |
| 3. Ozhukarai (Periapet) | 14. Bahur |
| 4. Murungappakkam | 15. Seliyamedu |
| 5. Mudaliyarpettai | 16. Suramangalam |
| 6. Nellitoppu | 17. Embalam |
| 7. Kommapakkam | 18. Kalmantapam |
| 8. Pillaitottam | 19. Madukkarai |
| 9. Arumattapuram | 20. Karkilambakkam |
| 10. Kuppam (Mannadippattu) | 21. Karaiyamputtur |
| 11. Puranasingapalayam | |

In the absence of regulated markets, the Pondicherry Co-operative Processing, Supply and Marketing Society started in 1955 provided marketing facilities for the sale and purchase of ground-nut in Pondicherry town. The Society, however, did not attract many farmers and its transactions were limited. Moreover, the Society was not competent to enforce the normal regulations of the regulated markets. Farmers prefer to take their produce to the regulated markets in South Arcot District like Panruti, etc., which are within convenient travel distance from their villages.⁵¹

The need for developing marketing centres for the agricultural produce engaged the attention of the Administration for sometime. With that end in view, the Pondicherry Agricultural Produce Markets Act, 1973 (Act No. 3 of 1974) was framed and passed by the legislature. This Act covers only two commodities viz., paddy and ground-nut. In December 1975, an eighteen-member Market Committee was constituted for Pondicherry region under section (4) of the Pondicherry Agricultural Produce Markets Act, 1973.

Paddy : Paddy is the main crop of this Territory. The levy portion of the produce is sold to the Food Corporation of India through its authorised agents in the village at prices fixed by the Government. The Pondicherry Co-operative Processing, Supply and Marketing Society also procures levy paddy along with the Food Corporation of India. The Marketing Society carries out procurement through the village co-operatives, besides operating in the Pondicherry *mandi*,

Non-levy paddy sales are mostly unregulated. Traders from Pondicherry town go to places such as Villiyanur, Bahur, Tirukkanur, Kariamankkam and other large villages immediately after harvest and purchase paddy. In many cases, during the lean season, paddy merchants advance money to the farmers who give an undertaking to sell paddy to the merchants at low cost-harvest prices. Some farmers straightway bring their produce to the Pondicherry *mandi* which is the only regular market for paddy and other cereals in the region.

Ground-nut : Ground-nut is marketed through the Co-operative Processing, Supply and Marketing Society in Pondicherry which is slowly developing into a market centre. During 1970-71 ground-nut valued at Rs. 18.36 lakhs was sold in the yard through auction. Farmers contend that the Pondicherry market is not conveniently located and the price offered here is comparatively low. They therefore prefer to take their produce to the regulated markets at Cuddalore, Villupuram and Tindivanam in South Arcot District. A recent survey showed that farmers in 190 villages out of a total of 268 villages in the Villiyanur Block go to the regulated markets in South Arcot. Farmers in Bahur Commune prefer Cuddalore and Villupuram. Those in Ozhukarai, Mannadipattu and Villiyanur go to Villupuram or Tindivanam. The vast majority of the farmers prefer to go to Villupuram. Farmers in villages near Pondicherry region prefer to sell their produce directly to the oil mills in the town.

Sugar-cane : The sale of sugar-cane is well organized as the entire produce is taken to Ariyur in Pondicherry region or to Nellikkuppam or Mundianpakkam in South Arcot District for crushing. The price of sugar-cane is fixed from time to time by the Government.

Cashew-nut : Cashew-nut produced in the region is entirely sold to private traders who come from Panruti in Tamil Nadu and from Kerala.

Tapioca : Tapioca, cultivated in the dry lands in Muttirapalaiyam and Periya Kalapet areas, is taken by farmers to Salem and Athur in Tamil Nadu where it is utilised for industrial purposes i.e. for the manufacture of tapioca flour, sago and vermicelli. The local industries are not yet in a position to absorb the entire output. There are collection centres at Mettupalaiyam, Muttirapalaiyam, Periya Kalapet and Chinna Kalapet.

Betel leaves : Betel leaves produced in Villiyanur, Ozhukarai and Ariyankuppam Communes are marketed wholesale at Villiyanur and Pondicherry where it is controlled by commission agents who conduct the auction five days a week except Fridays and Sundays. The superior quality betel leaves known as the Agra variety, harvested between January and May, are sold to merchants from North India.

Vegetables : Ariyankuppam is fast developing into an impressive wholesale vegetable market. Such vegetable varieties as brinjal, bendai, cluster beans, green chillies, raddish, plantain, lemon and various gourds, drumstick, coconut, etc., are marketed daily in the early hours of the day. Traders from Pondicherry, Villiyanur, Bahur, Tavalakuppam, Cuddalore and Tindivanam come here to make wholesale purchases. The vegetables are generally sold in basket loads. A study conducted by the Directorate of Pilot Research Project revealed a difference of as much as 50 per cent to 300 per cent between the wholesale prices at Ariyankuppam and the retail prices in Pondicherry town. The Ariyankuppam vegetable market which is located in a small site is found to be congested and without proper amenities. A good proportion of the famous Thengathittu brinjal is exported to Madras.

Milk : The need for improving the marketing of milk through co-operative societies by establishing collection and distribution centres was highlighted by the Techno-Economic Survey Team as early as 1965. Since then, the sale and distribution of milk has been well organised under the co-operative sector. Milk from the villages is collected twice daily by the Pondicherry Co-operative Milk Supply Society through its eleven collection centres and sold to the consumers through commission agents.* A good proportion of the milk is supplied to Pondicherry town and the surplus sold to Neyveli township.

Fish : Fish is sold by basket loads to private traders who come to Pondicherry from Cuddalore, Nellikkuppam, Panruti, Villupuram and Tindivanam. Fish from Kalapet and Nallavadu area is brought by women to Pondicherry town in fish vans. Prawns are purchased by traders or their agents from Cochin for export requirements. All fish marketing functions are held by

*The commission agency system was abolished and the booth system was introduced with effect from 1 June 1974.

middlemen who are responsible for lowering the income of the producers and increasing the price for consumers. Mahe and Yanam depend mainly on export for disposing bulk of their catches. In 1965, the National Council for Applied Economic Research called for the reorganisation of the Fishermen Co-operative Societies so as to include marketing among its functions. By way of recommendation, the Council also suggested the construction of a modern fish market with 20 stalls.

Eggs: Marketing arrangements for eggs were not adequately well developed even as late as 1965.⁵² Eggs produced in the region are sold in retail locally. Recently however, as a result of the programmes implemented under the Marginal Farmers Scheme, there is a marketable surplus of eggs. The Poultry Producers Co-operative had made arrangements to collect eggs from its constituent members to sell them through a network of sales centres.

Cattle : The Dharmapuri market in Ozhukarai Commune and the Madagadippattu market in Mannadipattu Commune are the two important cattle markets in the Territory.

The Dharmapuri cattle market meets every Friday. The cattle marketed here are only of the non-descript local varieties mostly for slaughtering. A study conducted by the Directorate of Pilot Research in 1973 showed that about 300 heads of cattle are marketed here every week. Animals are brought to this market from forty-two villages in Pondicherry region and thirty-seven villages in South Arcot. Dharmapuri's importance as a cattle market seems to be on the decline.

The Madagadippattu cattle market which meets every Tuesday is the largest and the most popular cattle market in the Territory. Besides Pondicherry region, this market also serves hundreds of villages in and around Villupuram, Tindivanam, Cuddalore, Mailam, Tirukkoyilur, Vanur, Kilianur, Nellikuppam, Panruti, Chidambaram, Valavanur, Vridhachalam, Ulundurpettai in South Arcot District. Cattle also arrive from such far off places as Tiruvannamalai, Kumbakonam, Thanjavur, etc. It is estimated that about 75 per cent of the cattle arrive from Tamil Nadu villages in the areas mentioned above. Apart from Pondicherry, traders arrive from Madras, Salem, Hosur, Bangalore, etc. Such local varieties known as *Vellai*, *Sevalai*, *Kari*, *Vattai*, *Merkathian*, *Therkathian*, *Poorani* and *Manapparai* are brought here for sale. Among these, *Merkathian*,

Therkathian, *Poorani* and *Manapparai* are the superior local varieties. Those marketed here are mostly draught animals meant for carts and ploughing although quite a few are purchased for slaughtering by merchants from several neighbouring towns in South Arcot. About 1,000 heads of cattle are known to change hands on every market day. Alongside, traders carry on a flourishing business in piece goods, coir, threads, vegetables, fish, bangles, agricultural implements, aluminium utensils and fruits. Mannadipattu Commune derives a sumptuous income by auctioning the right to collect entrance fee to the market.

XI. Co-operation in wholesale and retail trade

Consumers' Co-operative Stores : The consumers' co-operatives came to be accepted as a vital instrument for holding the price line in the sixties as they started playing a greater role in the distribution of essential commodities at fair prices to consumers.

In 1968 there were two co-operative wholesale stores and sixteen primary stores functioning in this Territory with a total membership of over 13,768 and paid-up share capital of Rs. 43 lakhs. The wholesale stores had 28 retail shops which sold consumer goods to the tune of Rs. 118.34 lakhs during 1968-69. The total profit earned by these stores during the year 1968-69 was of the order of Rs. 2.00 lakhs.

A departmental store known as Amudhasurabi was started as a separate unit of the Pondicherry Co-operative Wholesale Stores during 1969, and it sells all kinds of consumer goods from groceries to leather products. The progress of the consumer co-operative movement in Pondicherry will be evident from the following statement :

(Rupees in thousands)

Year			Number of societies	Number of members	Share capital	Sales	Net profit
1965-66	..	..	14	6,524	2,84	79,76	2,62
1966-67	..	..	15	11,571	3,32	1,13,70	3,23
1967-68	..	..	18	12,928	6,29	1,15,46	1,98
1968-69	..	..	17	14,115	6,43	1,18,34	1,99
1969-70	..	..	18	13,722	6,44	1,35,71	1,00
1970-71	..	..	18	15,185	6,69	1,23,32	91
1971-72	..	..	18	17,934	7,05	1,52,33	79
1972-73	..	..	18	18,865	7,78	1,80,51	71
1973-74	..	..	19	19,008	9,21	2,56,15	1,86

Marketing Societies : There are two marketing societies, one each in Pondicherry and Karaikal. The Pondicherry Co-operative Processing, Supply and Marketing Society established on 27 November 1955 operates a regulated market scheme for ground-nut and runs a manure-mixing plant in Pondicherry for preparing mixtures for various kinds of crops. The mixture is marketed under the name of "Hand-Brand". The oil mill started by the Society went into operation on 31 July 1975.

The Karaikal Co-operative Marketing Society established on 23 June 1955 plays a leading role in the procurement of paddy during the harvest season on behalf of the Food Corporation of India and on its own behalf. The paddy is converted into rice and distributed to consumers as per the directions of the Directorate of Civil Supplies. There was also a proposal to construct a modern rice mill in Karaikal under its auspices.

The Yanam Agricultural Producers' Marketing Co-operative Society has gone into liquidation.

The details of marketing societies in the Territory as on 31 March 1974 are given below :

1. Number of societies	.. ..	3
2. Number of members	.. ..	817
3. Paid-up share capital (Rs.).. ..	.. ..	66,000
4. Sales per month (average) (Rs.) .. ..	.. ..	4,40,000
5. Reserve fund and other reserves (Rs.) .. ..	.. ..	1,51,000
6. Loans from Governments (Rs.) .. ..	.. ..	1,25,000

The distribution of fertilizers, such as ammonium sulphate and nitrates, is carried out mainly through co-operatives in the Territory. Twenty-five per cent of the stocks of fertilizers allotted to the Territory are distributed to private dealers and the rest to the co-operatives. The actual distribution to the ryots is effected on the basis of permits issued by the Directorate of Agriculture. The Pondicherry Co-operative Marketing Society functions as a wholesale dealer in this respect.

The Weavers Co-operative Societies in the Territory market their products through the Tamil Nadu Handloom Weavers Co-operative Society. Fishing accessories are distributed to fishermen through the Fishermen Co-operative Societies and the Apex Federation.

Milk Co-operatives : There are thirty-five Co-operative Milk Supply Societies including the Pondicherry Co-operative Milk Producers' Union. The Pondicherry Co-operative Milk Supply Society is a pioneer institution in that it was the first society to be organised and registered in the Territory soon after merger. It started its operation on 7 February 1955 with 198 members on its roll and a paid-up share capital of Rs. 6,355 handling on an average 390 litres of milk per day. The society registered steady progress since then. As on 30 June 1975, the society had 8,035 members with a paid-up share capital of Rs. 4,50,310 apart from the Government's participation in share capital to the tune of Rs. 3,20,000. The average quantum of milk handled by the society per day stood at 9,500 litres in December 1975. As on 31 December 1975 the society had 32 milk distribution booths, both in the town and rural areas.

The Karaikal Co-operative Milk Supply Society started operation on 1 May 1955 with 128 members and a paid-up share capital of Rs. 2,710 handling about 24 litres of milk per day. It grew up steadily since then, both in terms of membership and milk handling capacity. As on 30 June 1975 the society had 3,454 members with a paid-up share capital of Rs. 59,850 handling about 2,500 litres of milk per day. As on 31 December 1975 the society maintained 47 milking yards in and around Karaikal.

The Mahe Co-operative Milk Supply Society, though registered on 4 September 1964, started operation on 2 October, 1964. The society issues loans to its members for the purchase of milch animals to increase its milk production. As on 30 June 1975 there were 95 members with a paid-up share capital of Rs. 1,750 as against 74 members and a paid-up share capital of Rs. 1,240 as on 30 June 1966.

Coffee Houses : The Indian Coffee Workers Co-operative Society Ltd., entered the catering field on 20 February 1958. This society which started operation with 21 members and a share capital of Rs. 4,147 had grown into a very big establishment with 301 members and a share capital of Rs. 1,11,258 as on 30 June 1974. With headquarters in Pondicherry, the society runs its

branches at present in Pondicherry town (3), at Madras (1), Kanchipuram (2), Tiruvannamalai (2) and Neyveli (1). Some of the branches run by the society at Arni, Sathanur Dam, Villupuram and Pondicherry had to be closed down as they were not found profitable.

Till 1974, the society obtained all its requirements of coffee seeds from the All India Workers Co-operative Societies Federation in New Delhi of which it is a member. Following improvements in its financial position, the society participates in the auction conducted by the Coffee Board in Bangalore, Ootacamund or Vijayawada. The society also runs a Co-operative Printing Press in Pondicherry. The society is administered by a nine-member Board of Directors elected once in three years.

XII. State trading

The Administration first entered the field of public distribution in the forties of this century i.e. when widespread scarcity of essential commodities was experienced as a result of World War II. This led to large scale black marketing of goods forcing the Administration to enter the field of public distribution.

A coupon system was first introduced in the year 1943 with the intention of supplying rice and kerosene which were not readily available in the open market for public consumption. But later on, maida, wheat, sooji and sugar were also supplied on coupons. The coupons were issued first in the form of cards and then in the form of booklets by the 'Mairie' of Pondicherry in pursuance of the orders of the 'Bureau de Ravitaillement' (Civil Supplies) then attached to the 'Bureau des Affaires Economiques'. The commodities were supplied through fair price shops, the dealers of which were nominated by the Government.

Price control measures were introduced for firewood, charcoal and even pulses. From January 1944 special coupons for cloth were issued. Yarn was distributed to weavers since January 1946 on special coupons. On the basis of certificates issued by the Health Officers, coupons were issued for items of baby foods like tinned milk, milk powder, etc.

In Karaikal there was neither strict control on the distribution of rice, which was carried on by private dealers nor a centralised agency to attend to distribution. The fixation of price of rice was attended to by a committee, of which the Administrator was the Chairman and a few merchants its members. It appears that in most of the cases, the price fixed was disadvantageous to the Administration. The sale proceeds of rice were credited once a week by the Administrator to the General Funds of the Government. Mahe got its requirements of 100 tonnes of rice from Karaikal every month from Government stock. In Yanam, paddy was purchased by Government at cheaper rates from the ryots of neighbouring villages of Yanam and stocked in godowns under the control of the Government. After milling, the same was delivered to retail dealers for sale to the public through ration cards. Owing to non-availability of certain food grains and essential commodities like sugar, kerosene, cloth, etc., a Branch Rationing Office was established in Yanam and arrangements were made to distribute the above commodities to the public through ration cards. Sugar and kerosene quotas were also allotted to the dealers of Yanam under special arrangements with the then Madras Government. Quotas of cloth varieties like shirtings, dhoties, etc., were allotted from Pondicherry mills to the wholesalers at Yanam for sales to the public on ration cards. It is learnt that in respect of other varieties of cloth, arrangements were made with the Madras Government for supply through mills there.

After merger : Even after merger, the distribution of scarce commodities was attended to by 'Bureau des Affaires Economiques' for some months. The staff dealing with the subject was then attached to the 'Bureau des Affaires Politiques'. The Essential Commodities Act, 1955 was extended to this Territory with effect from 27 January, 1956. There were then no special problems to attend to. Since 1959, however, there were signs of scarcity for items such as sugar, baby food and a rise in the price of rice and paddy which led to the issue of several *arrêtés* regulating the distribution of scarce commodities as during pre-merger days. It became increasingly necessary to set up a full-fledged office to attend to all problems connected with the public distribution of essential commodities. Accordingly, the Civil Supplies Office started functioning from 24 November 1964, charged with the responsibility of ensuring the regular supply of essential commodities. The office had also to enforce the various control orders issued since then by the Administration and the Central Government under the Essential Commodities Act, 1955, to regulate the price, sale, storage and movement of food grains and other essential commodities and for licensing of dealers in the Territory.

The price of food grains in the Territory is regulated or fixed by the following orders :

1. The Mahe Rice (Maximum Prices) Order, 1965.
2. The Pondicherry Cholan and Ragi (Maximum Prices) Order, 1966.
3. The Pondicherry Paddy (Maximum Prices) Order, 1967.
4. The Pondicherry Rice (Maximum Prices) Order, 1967.
5. The Yanam Paddy (Maximum Prices) Order, 1967.
6. The Yanam Rice (Maximum Prices) Order, 1968.

The following orders regulate the movement of essential commodities and food grains within or across the limits of the Territory:

1. The Pondicherry Coarse Grains (Export Control) Order, 1965.
2. The Pondicherry Paddy and Rice (Movement Control) Order, 1965.
3. The Pondicherry Paddy and Rice (Movement Control) Order, 1966.
4. The Pondicherry Cholan and Ragi (Declaration and Requisitioning of Stocks) Order, 1966.
5. The Pondicherry Coarse Grains (Movement Control) Order, 1966.
6. The Pondicherry Grams (Export Control) Order, 1966.
7. The Pondicherry Food Grains (Movement Restrictions and Exemption of Certified Seeds) Order, 1968.
8. The Pondicherry Gram and Gramdhal (Movement Control) Order, 1966.

The sale of food grains is either controlled or regulated through licensed dealers under the Pondicherry Food Grain Dealers Licensing Order, 1964. As on 31 March 1975 the number of licences issued in all the four regions stood as follows :

Territory	Pondicherry	Karaikal	Mahe	Yanam
413	222	170	15	6

Until 1969, the grant of licences for rice mills was regulated by the *arrêté* of 13 January, 1883. However, with the extension of the Rice Milling Industry (Regulation) Act, 1958 (Central Act 21 of 1958) to this Territory with effect from 15 May 1969, rice mills had to be licensed under the provisions of the above said Act and the rules made thereunder. Till 14 May 1969 the licensing of rice mills was attended by the Inspector of Municipal Councils and Local Boards. It is now attended to by the Directorate of Civil Supplies. As on 31 March 1974 there were 185 rice mills functioning in all the four regions of this Union Territory as detailed below:

Territory	Pondicherry	Karaikal	Mahe	Yanam
185	106	68	—	11

The Wheat Roller Flour Mills (Licensing and Control) Order, 1957 (Central) regulates the licensing of wheat roller flour mills in the Territory. However, no licence had been issued for wheat roller flour mills in the Territory till 1976.

The Pondicherry Guest Control Order, 1968 and the Pondicherry Food (Restriction on Service of Meals by Catering Establishments) Order, 1968 are the other regulatory measures now in force in the Territory. These orders seek to prevent the misuse and wastage of essential commodities so as to ensure their availability to the public.

So far as food grains are concerned the following are the Central Orders in force in the territory:

1. The Imported Food Grains (Prohibition of Unauthorised Sale) Order, 1958.
2. The Food Grains (Prohibition of use in the manufacture of starch) Order, 1966.
3. The Food Grains Movement (Exemption to Food Corporation) Order, 1966.
4. Food Grains Movement Restriction (Exemption of Seeds) Order, 1970.

Rationing : Informal rationing was first introduced with effect from 1964 in the three chronically deficit communes of Pondicherry, Mudaliyarpettai and Ozhukarai in Pondicherry region where 20 fair price shops were opened. In Karaikal, the millers and the Marketing Society declare the stocks to the Administrator who issues necessary directions in the matter. The movement of rice from Karaikal to Mahe and its distribution to consumers was entrusted to private merchants. This system did not work well. When in 1956, the Mahe Employees Co-operative society was set up, it took up the entire work of distribution of essential commodities required for this region and this arrangement still continues :

Family identity cards are classified under four groups viz., A, B, C & D. 'A' cards are issued only to agriculturists and landlords who are entitled to get all food commodities except rice supplied. 'B' card holders get rice supply for a period of six months together with other commodities. 'C' and 'D' card holders get their full requirements of rice and other commodities. The supply of rice to card holders who are either land-owners or who get their requirements of rice from outside is correspondingly reduced or stopped. Family identity cards in Pondicherry Commune were last renewed in 1970 and the work of renewing the family identity cards of Mudaliyarpettai Commune was taken up by the end of 1970. In all, 19,110 family identity cards were issued to the public in Pondicherry Commune, 5,578 cards in Mudaliarpettai and 11,132 cards in Ozhukarai and 3,361 cards in Mahe.

In 1970 the number of fair price shops was increased from 20 to 44 duly fixing a ceiling of 700 to 900 ration cards for each shop. In the meanwhile, arrangements were made for the distribution of food grains to mill workers through the Co-operative Employees Stores attached to the mills. The distribution of sugar in the rural areas of Villiyanur and Ariyankuppam was arranged through Village Co-operative Societies. As on 31 March 1971, as many as 71 fair price shops were in operation in the Territory i.e., 44 in Pondicherry region, 12 in Karaikal town and 15 in Mahe region. Owing to the satisfactory food position in the Territory, the public distribution system was suspended with effect from 16 April 1971 in all the three Communes of Pondicherry. But rationing was again introduced with effect from 26 November 1971 in the three Communes of Pondicherry, Karaikal town and Mahe region on the advice of the Central Government. The commodity-wise position is explained in the next few paragraphs.

Rice : Of the four regions, only Pondicherry and Karaikal are major rice producers, and rice is the staple food of the people in all the regions. While in terms of production, Pondicherry region suffers a deficit, Karaikal enjoys a surplus. The rice produced in the other two regions is hardly sufficient to meet their own requirements.

The monthly requirement of rice for Mahe, estimated at about 180 metric tonnes, is supplied by the Food Corporation of India at the rate of 200 tonnes per month. Out of this, a good portion is received directly from the Central stock held by the Food Corporation of India at Cannanore and the balance taken delivery of either from the Food Corporation of India Depot at Coimbatore or Karaikal based on the release order issued by the Directorate of Civil Supplies.

Whenever there is surplus production of rice, the Administration makes arrangement to export some quantity to a needy State. Thus in 1965, as much as 2,134 tonnes of rice were exported to Kerala. On the other hand, during periods of short fall in production, the Government obtains from the Central stocks. In 1969 when the Pondicherry region was affected by drought, 1,000 tonnes of rice were obtained from the Government of India stocks. Delivery from the Central Pool is taken by the Food Corporation of India. Similarly, during 1970 also when there was a short fall in procurement in Karaikal region, the Government had to approach the Government of India for the allotment of 2,000 metric tonnes of rice.

Wheat : Till 1964, the regions of Pondicherry and Karaikal used to get their wheat supplies met from allotments to Tamil Nadu. The requirements of Mahe and Yanam used to be drawn from the quota allotted to Kerala and Andhra Pradesh respectively. As this arrangement did not work well, the Centre was requested to sanction a separate quota for this Territory. Since 1964 the Centre started sanctioning a separate monthly quota of wheat which was drawn from the Regional Directorate of Food (Central Storage), Madras. Till 1969, the monthly requirement of wheat products was supplied by the flour mills of Tamil Nadu on the advice of the Food Corporation of India. The Inter-zonal Wheat and Wheat Products (Movement Control) Order, 1969 came into force on 14 April 1969. This order was rescinded on 4 April, 1970. After the control and distribution system of wheat products was lifted by the Government of Tamil Nadu, the Food Corporation of India stopped operating on behalf of this Administration. Hence, separate arrangements were made by

the Administration to get the supply of wheat products through a private firm (M/s) Honesty Agencies from one of the roller flour mills in Tamil Nadu. Sizeable quantities of maida and sooji poured into Pondicherry. With increased availability, the prices of maida and sooji came down and were sold at a rate lower than the controlled price fixed by the Government of India, whereas the price of wheat bran went up since January 1970. Hence, control on wheat products was lifted temporarily on the request of wholesalers and bulk consumers. Control was reimposed subsequently. Details of wheat allotments since 1965 are given below :

(In tonnes)

		Wheat	Maida	Sooji
1965-66	2,400	1,428	348	
1966-67	2,400	1,428	348	
1967-68	2,400	1,646	532	
1968-69	2,400	1,428	348	
1969-70	2,400	1,428	348	
1970-71	1,200	1,428	456	
1971-72	1,200	1,428	456	
1972-73	867	666	128	
1973-74	1,186	1,162	415	
1974-75	1,800	1,672	290	

Sugar: Sugar is distributed to the public either through fair price shops or through Co-operative Village Credit Societies. The Pondicherry Sugar Control Order, 1966 regulates the sale of sugar to the public at controlled price.

From December 1967, 185 tonnes of sugar were allotted every month at controlled rate. Due to inadequate allotment of levy sugar by the Government of India, the entire needs of the public could not be supplied through Family

Identity Cards. The allotment of sugar which was 195 tonnes per month till December 1968 was enhanced to 205 tonnes per month from January 1969. Besides *ad-hoc* quotas are allotted to meet the special requirements of marriages, festivals and other important ceremonies. Since 1967, this Territory was allotted a monthly quota of 296.1 metric tonnes including 0.1 tonne for pharmaceutical industries. In 1970 this was further increased to 400 tonnes which are distributed among the four regions as follows :

Territory		Pondicherry	Karaikal	Mahe	Yanam
400	.. ..	271	90	35	4

With the partial de-control of sugar since November 1967, the price of free market sugar was maintained at the level of Rs. 3.60 per kg. and the distribution of controlled sugar was made through family identity cards. Following de-control of sale and movement of sugar by the Government of India with effect from 25 May 1971, the South India Sugar Mills Association agreed to give 10 per cent of the sugar at Rs. 150 per quintal excluding excise duty. In January 1972 all the sugar mills in India agreed to give 60 per cent of their release at Rs. 150 per quintal excluding excise duty. Accordingly, this Administration received a quantity of 246.1 tonnes of sugar per month for distribution through family identity cards.

The sale of sugar in the Territory is regulated through licensed dealers under the Pondicherry (Free sale) Sugar Dealers Licensing Order, 1967 and the Pondicherry (Levy) Sugar Dealers Licensing Order, 1967. As on 31 March 1975 the number of dealers licensed for the purpose was as follows :

Category		Territory	Pondicherry	Karaikal	Mahe	Yanam
Free sale sugar	..	23	11	12	Nil	Nil
Levy sugar	..	83	62	Nil	14	7

The Sugar Export Promotion Act, 1958 also stands extended to this Territory with effect from 19 April 1961.

Kerosene/Petroleum Products : The Territory's requirements of kerosene are met by the Centre once every quarter. The distribution of kerosene is carried out through a few licensed wholesalers who distribute the same through their retail dealers under the Pondicherry Kerosene Control Order, 1966. The wholesalers obtain their stock from their principals at Madras. Given below are the details of kerosene allotments to the Territory (region-wise) since January 1974 :

(In kilo litres)

			Territory	Pondicherry	Karaikal	Mahe	Yanam
January 1974	..	..	960	194	153	13	—
March 1974	..	..	1,465	1,193	242	30	—
June 1974	..	..	2,065	1,749	276	40	—
October 1974	..	..	1,705	1,488	187	30	—
January 1975	..	..	1,235	1,041	164	30	—
March 1975	..	..	1,537	1,263	234	40	—
June 1975	..	..	1,888	1,557	281	50	—
October 1975	..	..	1,564	1,268	256	40	—

The licensing of the wholesale and retail dealers is regulated by orders issued from time to time. Region-wise details of wholesalers and retailers as on 31 March 1975 are furnished below :

			Territory	Pondicherry	Karaikal	Mahe	Yanam
Wholesalers	..	..	10	4	5	1	Nil
Retailers	..	..	324	74	225	11	14

The wholesale and retail selling prices of kerosene are also fixed by the Government as and when necessary. The following are the orders in force in the Territory:

- The Petroleum Products (Collection of Information) Order, 1965.
- The Petroleum Products (Supply and Distribution) Order, 1965.
- The Kerosene (Restriction on Use) Cessation Order, 1966.
- The Kerosene (Price Control) Order, 1966.
- The Kerosene (Fixation of Ceiling Prices) Order, 1966.
- The Kerosene (Restrictions on Use) Order, 1966.
- The Pondicherry Kerosene Control Order, 1969.

Controlled cloth : The sale of controlled cloth at market price is watched by the Directorate of Civil Supplies with the help of the Enforcement Staff of the Textile Commissioner's Office, Coimbatore. The following are the Central Orders in force in the Territory which have a bearing on cotton textiles :

1. The Cotton Textiles (Control) Order, 1948.
2. The Cotton Textiles (Export Control) Order, 1949.
3. The Cotton Textiles (Production by Powerlooms) Control Order, 1956.

Vegetable oil : The distribution and sale of vegetable oil in the Territory is sought to be regulated through licences issued to dealers under the Pondicherry Hydrogenated Vegetable Oil Dealers Licensing Order, 1969. The number of licences issued to dealers region-wise is given below :

Territory			Pondicherry	Karaikal	Mahe	Yanam
34	..	..	21	13	Nil	Nil

Cement : The distribution of cement is regulated in the Territory by the Pondicherry Cement Distribution (Licensing and Regulation) Order, 1973 passed in exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955.

Procurement : Although in terms of production the Territory enjoyed a surplus, it was considered necessary to enter the field of procurement to meet its requirements of informal rationing that was in force in the Communes of Pondicherry, Mudaliyarpettai and Ozhukarai. In the beginning, a voluntary levy system was introduced on an acreage basis. The Pondicherry Paddy and Rice (Declaration and Requisition of Stocks) Order was the first step taken in this direction in 1964.

Following the passage of the Food Corporation Act, 1964 which was made applicable to the whole country, the Food Corporation of India made its entry into Pondicherry in 1964 by opening a branch here. As the Government also did not wish to enter the field of procurement, storage and distribution directly involving its own funds and personnel, it entrusted the work to the Food Corporation of India which functioned as the Chief Agent. The Branch Office under the control of the Regional Manager, Food Corporation of India, Tamil Nadu, took charge of procurement of rice, storage of food grains and fertilizers, and distribution of wheat and fertilizers. Apart from the Corporation, the Pondicherry Co-operative Processing, Supply and Marketing Society and the Pondicherry Co-operative Wholesale Stores in Pondicherry region and the Karaikal Processing, Supply and Marketing Society and some millers in Karaikal region also functioned as procurement agents to collect levy food grains from local land owners and merchants. These agents procure paddy, convert it into rice and hold stocks on Government account. They distribute the same to the nominees of the Government. Check posts were established at 10 border points in Pondicherry and at five border points in Karaikal region. In order to intensify procurement, the Administration issued the Pondicherry Paddy (Procurement by Levy) Order, 1966 imposing a compulsory levy on producers. This order came into force on 5 February 1966. The check posts were however removed at the end of May 1966 and again re-established in January 1967. After 1967, the Food Corporation of India enlarged its activities in Karaikal leaving for the millers a restricted role in the purchase, storage and sale of rice to the public. The task of procurement both in Pondicherry and Karaikal come under the Food Corporation of India.

On an average about 20,000 metric tonnes of paddy were procured from the two regions although the commitment of the Administration was of the order of 16,000 metric tonnes of rice per year. During 1968-69, procurement amounted to 18,000 tonnes besides 20 per cent from the Pondicherry *mandi*.

The next year procurement amounted to 21,000 tonnes, besides 20 per cent from the Pondicherry *mandi*. During 1970-71, only 9,830 tonnes of rice was procured. An additional quantity of 500 tonnes of rice was imported to meet the Territory's overall requirements. Supplementary procurement at the rate of 20 per cent was also effected in the Pondicherry *mandi* on the marketable surplus brought by the ryots and merchants for sale. Procurement was given up in April 1971 on account of the satisfactory food position. However as a result of the emergency, following the Pakistani aggression, procurement was reintroduced on 26 November 1971. To boost procurement, 20 per cent of the open market paddy arrivals in Pondicherry *mandi* were also collected from the dealers. Fourteen check posts in Pondicherry region and seven in Karaikal were established to prevent illicit movement of food grains from the Territory.

The Food Corporation of India has several godowns to store its food grains and fertilizers. Most of its stocks are stored in godowns taken on rent. Four godowns are of 1,500 metric tonnes capacity each, two of 1,100 metric tonnes capacity, one of 400 metric tonnes and another of 225 metric tonnes. All these eight godowns are located close to the port. Another godown of 1,500 metric tonnes capacity is located in Nellitoppu. The godown at Tiruvandarkovil of 2,800 metric tonnes capacity belongs to the Food Corporation of India. Apart from these, one godown of 5,000 metric tonnes capacity is under construction within the campus of the Pondicherry Railway station. The Corporation's branch in Karaikal has one godown at its disposal.

XIII. Weights and Measures

The question of standardising weights and measures used by the public in the Territory received attention even before merger because of Pondicherry's special relation with France, the chief exponent of the metric system. It may be recalled that the metric system was introduced in France soon after the Revolution in 1789, and was declared compulsory since 1840. The then Pondicherry Administration also decided to follow suit and appointed a commission by an order dated 30 March 1840 to study the problem and to examine the relation between the metric system and the local systems of weights and measures and suggest ways and means for the final replacement of the local weights and measures with metric equivalents.

After considerable deliberation, the commission suggested that the prevailing *marakkals* be rounded off into litres. On the basis of the recommendation of the commission, the order of 12 September 1842 was issued making compulsory the use of litres in Karaikal region. The public were required to use the following capacity measures in Pondicherry and Karaikal regions :

Pondicherry :

Bare marecal	10 measures	=	10 litres
Bare marecal	6 measures	=	6 litres
Bare marecal	4 measures	=	4 litres
Bare marecal	3 measures	=	3 litres
Bare rettapady	2 measures	=	2 litres
Bare pady	1 measure	=	1 litre
Bare arepady	1/2 measure	=	500 millilitres
Bare kappady	1/4 measure	=	250 millilitres
Bare arecalpady	1/8 measure	=	125 millilitres
Aremagani	1/16 measure	=	62.5 millilitres
Kalmagani	1/32 measure	=	31.25 millilitres

Karaikal :

Bare marecal	4 measures	=	4 litres
Bare rettapady	2 measures	=	2 litres
Bare chinnapady	1 measure	=	1 litre
Bare calpady	1/2 measure	=	500 millilitres
Bare arecalpady	1/4 measure	=	250 millilitres
Bare visampady	1/8 measure	=	125 millilitres
Bare arevisampady	1/16 measure	=	62.5 millilitres
Bare calvisampady	1/32 measure	=	31.25 millilitres

In transactions involving weighing operations, *rathals* and *kundus* equivalent to 1/2 kg. and 25 kg. respectively were used. All the various **Bureaux** under the former French Administration were directed to follow the metric system in all their dealings. In course of time land survey records and cadastral maps were also maintained in metric units. Measurements of length and area were expressed in terms of metric hectares, ares and centiares,

Even medical prescriptions were indicated in metric units. Children in all primary and secondary schools were taught to use the metric system of measurements.

Some measure of control on the weights and measures used in the territory came to be exercised only after the deliberation of **Conseil Général** of 4 October 1913 given effect to by the **arrêté** of 10 April 1916.⁵³ For carrying out the purposes of this order, the whole territory was divided into seven 'areas', each area being placed under the charge of a '**Contrôleur de Contributions**' or Revenue Delegate who had with them standard weights and measures, besides weighing and measuring instruments. The standard weights and measures in the custody of the above said officials were required to be verified and stamped once every three years by a Commission appointed by the Governor.

The periodical verification of weights and measures used by the trading community was carried out once in twelve months. Fees chargeable for such verification ranged from four annas to one and a half rupees. Wherever the transport of weights and measures posed some difficulty, the verification was carried out on the spot itself. The Revenue Officials were empowered to carry out surprise checks at all reasonable times and to seize all time-barred weights and measures and weighing or measuring instruments which did not carry the annual verification stamps. Those who did not comply with the orders were fined.

Some of the important units of weights and measures which were in use in Pondicherry and Karaikal regions before merger are given below :

Weights :		Kg.	G.	Mg.
1 Kundu	..	25	—	—
1 Maund (French)	..	12	—	—
1 Thooku	..	1	860	—
1 Veesai	..	1	500	—
1 Rathal	..	—	453	41
1 Thola	..	0	11	662
1 Varaganedai	..	0	—	540
1 Kundumani	..	0	0	111.6

Capacity measures (Solids) :

8 mahani	—	1 pady
4 pady	—	1 marakkal
12 marakkal	—	1 kalam

Capacity measures (Liquids) :

1 seer	—	500 ml.
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Area measures :

1 manai	—	2,400 sq. ft.
24 manai	—	1 Kani
484 manai	—	1 Sq. mile

Measurement of time :

60 vinadies	=	1 nazhigai (24 minutes)
$3\frac{3}{4}$ nazhigai	=	1 muhurtham
2 muhurtham	=	1 jamam
8 jamam	=	1 day

The measure used for salt was different . One salt *marakkal* was equivalent to three ordinary *padys*. Liquids like milk and curd, etc. were also measured in terms of *pady*. In measuring oils, the prevalent unit was *sembu* and its fractions equivalent to *pady*.

In transactions involving the sale of toddy, Roora (4.1) and Kattai (1.1) were used as measures. *Darahma* was the unit of measurement for country liquor. In liquor shops, the British measure of ounce was also used. Petroleum products were measured in terms of gallons. In textile transactions, *yard* and *muzham* were the main units of measurement in use. In measuring area, metric units like 'hectares' and 'ares' were used in Government records while in local practice *kuzhi*, *ma* and *veli* were used.

In Mahe the following weights were used for weighing sugar, vegetables and grains.

16 dram	= 1 ounce	= $2\frac{1}{2}$ rupees weight locally known as palam
4 ounces	= 1 palam	= 10 rupee weight
4 palams	= 1 rathal (pound)	40 rupee weight
32 rathal (pound)	= 1 tulam	
$3\frac{1}{2}$ tulam	= 1 shatathookam	= 112 rathals (pound)
20 shatathookam	= 1 ton	= 2240 pounds

The following were the weights used for weighing gold :

1 veesham	= 1 nenmani thookam (weight of a paddy grain)
4 veesham	= 1 kunnikuru
2 kunnikuru	= 1 manchadi
4 manchadi	= 1 panam = 16 veesham
20 panam	= 1 pavan (weight of one sovereign)
30 panam	= 1 rupee weight

The following were the measurements of length used by carpenters :

8 thovara	= 1 viral
12 viral	= 1 chaan
24 viral	= 1 kol usually used by carpenters
4 chaan	= 1 muzham
4 muzham	= 1 maar
1,000 maar	= 1 mazhika

The following units were used for measuring cloth :

12 inches	= 1 feet
3 feet	= 1 yard (vara)

The following units were used for measuring wood :

Cubic measurement of wood	= cubic kol
1 kandy	= 13 cubic feet = 1 cubic kol

The following units were used for measuring grains :

2 azhak	=	1 uzhake
2 uzhake	=	1 ury
2 ury	=	1 nazhy
4 nazhy	=	1 edangazhy
10 edangazhy	=	1 para
8 para	=	1 chak (one bag)

The units used for liquids were as follows :

2 azhak	=	1 uzhake
4 uzhake	=	1 nazhy
4 nazhy	=	1 edangazhy
5 nazhy	=	1 kutti
16 kutti	=	1 padam
$18\frac{3}{4}$ kutti	=	1 kandi

The units of measurement of grains and liquids prevalent in Yanam region were as under :

kuncham	=	4 seers
seru	=	$\frac{1}{4}$ of kuncham
tava	=	$\frac{1}{8}$ of kuncham
sola	=	$\frac{1}{16}$ of kuncham
ara sola	=	$\frac{1}{32}$ of kuncham
gidda	=	$\frac{1}{64}$ of kuncham
ara gidda	=	$\frac{1}{128}$ of kuncham

The units for measuring groceries were as follows :

manud	= 8 visa
visa	= 120 tholas
padalam	= 60 tholas
embulam	= 30 tholas
pampu	= 15 tholas
ara pampu	= $7\frac{1}{2}$ tholas
patika pampu	= $2\frac{3}{4}$ tholas

Land was measured as follows :

putty	= 8 acres
akaram	= 1 acre
kuncham	= $\frac{1}{10}$ acre
seru	= $\frac{1}{4}$ kuncham
tava	= $\frac{1}{8}$ kuncham
sola	= $\frac{1}{16}$ kuncham
ara sola	= $\frac{1}{32}$ of kuncham
gidda	= $\frac{1}{64}$ of kuncham
ara gidda	= $\frac{1}{128}$ of kuncham

The unit of length in use was the yard.

After merger : As there was always commercial intercourse specially in regard to food-stuffs and other essential commodities between Pondicherry and the adjoining States, attempts to standardise weights and measures in this Territory did not always prove successful, and conditions were becoming worse. Weights and measures based on the metric system, the British system and those of local origin were in use side by side. Even the local system of measures and weights varied from region to region. Such state of affairs prompted the antisocial elements among traders to resort to fraud and malpractices.

The Madras Standards of Weights and Measures Act, 1956 was extended to this territory with effect from 13 August 1958. As a first step the metric units of weights were brought into force in the territory with effect from

1 October 1958 with a tolerance period of two years during which the old system of weights was allowed to continue. On the advice of the Standing Metric Committee, all administrative institutions in the territory were advised to adopt the metric system of weights. With effect from 1 October 1960 the use of metric weights became compulsory.

The metric capacity measures were introduced throughout the territory with effect from 1 April 1961 with a period of tolerance of one year and its usage became compulsory with effect from 1 April 1962. The Madras Weights and Measures (Enforcement) Act, 1958 and the rules made thereunder were extended to this territory with effect from 7 September 1961. After the introduction of the above Act, Inspectors were appointed to enforce the provisions of the said Act and Rules. Wholesale rice and paddy merchants were then required to transact sale only by metric weights. The metric measures of length were introduced from April 1962 with a period of tolerance of six months. The provisions of the Act relating to units of mass came into force with effect from 1 January 1962.

Timber however continued to be sold in non-standard units as suppliers from other States had not switched over to the metric system nor rationalised the sizes of timber. The textile industry which had adopted the metric system reverted back to the English system with effect from 1 February 1966 as this system continued to be prevalent all over the world especially in countries to which our textiles were exported. The metric system was enforced in the timber trade from 1 October 1967. The enforcement of capacity measures in the petroleum trade was completed by 31 March 1963 and the use of area measures for land was then brought into force with effect from 1 October 1965.

The Pondicherry Weights and Measures (Enforcement) Rules were brought into force with effect from 10 August 1968 replacing the Madras Weights and Measures Rules till then in force. All these steps, in turn, increased the demand for metric weights. In the circumstances, some of the local foundaries were encouraged to resort to the manufacture of the weights and measures. However scarcity of raw materials stood in the way and little progress was achieved. In the meanwhile the approved dealers in Pondicherry approached the manufacturers in Agra to supply the immediate requirements of the Territory.

Regionwise details of licence-holders as on 31 March 1974 are furnished below :

Area				Manufacturer's licences	Seller's licences	Repairer's licences
Pondicherry	..	..	..	3	9	9
Karaikal	..	..	..	—	3	5
Mahe	..	..	..	—	—	—
Yanam	..	..	..	—	—	—

The Office of the Controller of Weights and Measures was formed in November 1959 with responsibility to deal with all matters connected with Weights and Measures and Excise. It was originally placed under the administrative control of the Finance Department. In May 1967, the administrative control of the Office of the Controller of Weights and Measures was transferred from the Finance Department to the Revenue and Development Department.

XIV. Associations and organs of trade news

Chambre de Commerce : The growth of industry and trade led to the establishment of a **Chambre Consultative de Commerce** in Pondicherry by the **arrêté** of 13 February 1849.⁵⁴ It was first conceived only as a consultative body to advise the Government. The **arrêté** of 21 February 1849 determined the number of European and Indian members of the **Chambre de Commerce**.⁵⁵

In the beginning, the members of this body met in the reading-room of the Public Library to discuss their problems. From time to time the Chamber was called upon to offer its views on problems affecting commerce and industry and to suggest ways and means to improve the climate for its growth. However, very little is known of the activities of the Chamber since then upto 1852. The Chamber came to the limelight again in 1852, under a different nomenclature viz., '**Commission agricole et commerciale**'. This '**Commission**' constituted by the **arrêté** of 7 September 1852 had the

'**Receveur du Domaine**' (an official of **Service des Contributions**) as its president. ⁵⁶ Subsequently, another association with representatives of commerce and agriculture was constituted by the **arrêté** of 19 June 1856 in the manner of those in the French colonies in America. ⁵⁷

The **Chef du Service des Ponts et Chaussées** and the **Juge de Paix** performing the functions of the Mayor and the **Chef de la Pharmacie** were its permanent members. The new **arrêté** stipulated that this Chamber should be consulted whenever changes were sought to be made in laws affecting agriculture and commerce. The Chamber was responsible for holding competitions and awarding prizes for participation in exhibitions, the collection of agricultural and commercial statistics, tendering advice on the establishment of agricultural schools, etc.

Everything in the industrial sphere went on well until about the sixties when the policy of free trade started gaining ground all over the world. Certain French colonies like Senegal voted for the free entry of all goods into their country, irrespective of their origin. The Chamber of Pondicherry which was opposed to this policy had to find a way out to overcome the situation. The main difficulty was that the net cost of the '**toiles bleues**' of Pondicherry was higher than those produced in Belgium and England. Although textile goods imported from Belgium were subjected to taxes, they turned out to be cheaper than the Indian cloth. It was about this time that a modern weaving mill came to be established as an adjunct to the spinning mill with a view to reducing the cost of manufactured cloth.

The **arrêté** of 1 September 1864 reconstituted the Chamber of Agriculture and Commerce into the Chamber of Commerce. Under the new dispensation, it was not merely a consultative body but gained some measure of autonomy. ⁵⁸ The Chamber had to keep itself in touch with the outside world and particularly with similar bodies in Madras, Calcutta, Bombay, St. David, Port Louis, Marseille, Bordeaux, Nantes, Saint-Malot and Le Havre. The Chamber also published the "**Prix-Courant**", a small tract giving information about coins in use, rate of customs duties, prices of goods, movement of ships, etc.

The Chamber then fought for the entry of '**toiles bleues**' and other products of Pondicherry into Senegal, a cause it had espoused since then relentlessly. In 1873, following differences of opinion between the Chamber and an important business firm, all its members submitted their resignation.

This paved the way for introducing some changes in its constitution. Another reorganisation took place in June 1879.⁵⁹ The *arrêté* of 20 May 1907 brought in further constitutional changes and vested the Chamber with civil status.⁶⁰ The Chamber consisted of fifteen members, nine Europeans and six Indians, all domiciled citizens of Pondicherry. The other establishments were represented in the Chamber by one or more nominated members (*membres correspondants*) depending upon the importance of the establishment concerned.

The decree of 6 July 1934 promulgated in Pondicherry by the local *arrêté* of 31 July 1934 was the last in the series which dealt with the working of the Chamber.⁶¹

At the time of merger the governing body of the Chamber consisted of a President, a Vice-President, a Secretary, a Treasurer and nine members besides the Director of *Banque de l'Indochine* and '*Agent des Messageries Maritimes*'. These two members are no longer represented in the Chamber. The term of governing members, one third of whom are elected every two years, is fixed for six years.

Elections to the governing body of the chamber used to be held under the supervision of the Mayor of Pondicherry Municipality. With the passage of the Pondicherry Municipalities Act, 1973 and the abolition of the office of Mayor, no one else had been declared competent to conduct the election. Membership in the Chamber was open only to those who were liable to pay *patentes*. Following the abolition of *patente* under the Pondicherry *Patente (Abolition) Act*, 1970 with effect from 15 August 1970, the question of qualification for membership in the Chamber has also become uncertain.

The Chamber was almost a semi-autonomous body and wielded considerable power and influence during the French days. But with the establishment of the Directorate of Agriculture, Industries etc., after merger the scope of activities of the Chamber stood considerably reduced. The Chamber now functions mainly as a liaison agency between those who represent trade, industry and commerce and the Government.

During the French period, the Chamber used to receive a small portion of the *patente* collection, the port-tax (*droit de quais*) and boat-tax (*droit de cheligues*) from the Government for carrying on its functions. In due course

this source of income dried up under the changed circumstances. With the prior approval of the Government, the Chamber could also raise loans with a view to meeting certain items of capital expenditure. It now subsists almost entirely on the income derived by way of rent from its building and godowns.

Other Trade Associations : The Shroff Merchants Association was formed on 29 September 1953 for the purpose of safeguarding the interests of the community engaged in the trade. The Association also avows to inculcate the principles of honesty in business. As part of this effort, the Association had opened a Weighing Centre for the public to weigh the jewels and give bills specifying the exact weight. Highly sensitive scales are used by this weighing centre.

The following are some of the important trade associations in the Territory :

1. The Muttialpet Nells Thotty Rice Merchants Association, 2, St. Simonpet, Muttialupettai.
2. The Pondicherry Nallumandi Vyabarigal Sangam, Paddy mandi, Jawaharlal Nehru Street, Pondicherry.
3. The Pondicherry Toddy and Pattai Sellers Association, 111, Ambalathadayar Madam Street, Pondicherry.
4. The Pondicherry State Chemists and Druggists Association, 80-82, Jawaharlal Nehru Street, Pondicherry.
5. The Pondicherry Confectionary Owners Association, 11, Upstairs, Kamatchiamman Koil Street, Pondicherry.
6. The Pondicherry Tempo Auto-Rickshaw Owners Association, 63, Bharathi Street, Pondicherry.
7. The Pondicherry Liquor Bar Owners Association, 102 Mahatma Gandhi Road, Pondicherry.
8. The Pondicherry Territory Bakery Owners Association, 14, Diagamudaliar Street, Pondicherry.
9. The Pondicherry Territory Chit Fund Association, 51, Ambalathadayar Madam Street, Pondicherry.

10. The Pondicherry Liquor Merchants Association, 53, Jawaharlal Nehru Street, Pondicherry.
11. The Pondicherry Small Industries Association, C/o Chamber of Commerce, Pondicherry.
12. The Pondicherry Territory Printers Association, 48/B, Ambalathadayar Madam Street, Pondicherry.
13. The Pondicherry Pawn brokers Association, 72, Bharathi Street, Pondicherry.
14. The Pondicherry Rice Mill Owners Association, 22, Kalatheeswaran Koil Street, Pondicherry.

Besides those mentioned above, there are several other associations representing handloom weavers, manufacturers, etc. in the Territory. But one particular characteristic of many of these associations is that they are most of the time in a state of dormancy but wake up to some kind of activity only when they are faced with some problem affecting their interest.

Organs of Trade News : The Bulletin of the **Chambre de Commerce** sponsored by the Pondicherry Chamber of Commerce first appeared as a quarterly journal from 1966, both in Tamil and English dealing chiefly with problems faced by the business as well as the industrial community of Pondicherry. It started appearing once a year since 1971 and it ceased to appear after two years.

The Directorate of Industries brings out a quarterly journal 'Pondicherry Industries News' for the benefit of small-scale industrialists, exporters and traders in the Territory since January, 1972.

The Bureau of Statistics, apart from furnishing the weekly retail prices of about 60 essential commodities to the Central Statistical Organization and to the Planning Commission and the weekly retail prices of about 34 essential commodities to the Directorate of Economics and Statistics, New Delhi, also publishes the weekly price statistics in the Gazette in the form of a Statistical Supplement every month,

Daily wholesale prices of paddy, rice, sugar, coconut, ground-nut kernels, ground-nut oil and gingelly oil prevailing in the Pondicherry market are collected and sent to the District Statistical Officer, Tiruchchirapalli, by telegram to be included in the daily News Bulletin of the Rural Programme broadcast by All India Radio, Tiruchchirapalli.

The weekly market review on variations in wholesale prices of paddy, rice, coconut, ground-nut and vegetable oils and total arrivals of paddy and rice every week is prepared and despatched every Friday to the District Statistical Officer, Tiruchchirapalli, for inclusion in the weekly bulletin on prices broadcast from Tiruchchirapalli station every Monday.

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CHAPTER VII

COMMUNICATIONS

I. Roadways

Old time trade routes :

Even before Pondicherry could emerge as an important town on the land map of India, its name was engraved in the world map of navigation as an important sea port on the Coromandel Coast, having had commercial links with Rome and other Mediterranean ports as early as second century B.C. That the port of Pondicherry must have continued to flourish even upto the XII century is endorsed by the findings of Chinese Celadon wares in Arikamedu. According to Sangam literature, there was a route from Kanchi all the way to Pumpuhar. But it is not known whether this route passed through 'Puduvai', although in later years there was close contact between Pondicherry and Tarangambadi, which developed close to the site of ancient Poduca and Kabaris respectively. Rafail Danibegashvile, the Georgian merchant and diplomat who arrived in Bondochery (Pondicherry) around 1799 by sea from the town of Mannar, travelled over road from here to the town of 'Trakbar' (Tarangambadi) where, he tells, he arrived in three days.¹ According to Alfred Grandidier, there was a cartworthy road even before 1863 between Pondicherry and Kanchipuram.²

It is said that Saint Gnana Sambandar visited Vaduhur (Tiruvandar-kovil in Mannadipattu Commune) in the VII century and sang a *pathigam* of eleven songs in honour of 'Vadukiswarar.' If the order in which the places visited by Saint Sambandar as given by Sekkizhar is accepted, he must have arrived at Vaduhur from Thirupathiripuliyur and proceeded towards Tiruvatigai from here. Anandarangapillai quite often refers to Tiruvatigai as Tiruvadi in his diary. It is possible that there must have been communication between all these places visited by Sambandar in the VII century. St. Francis Xavier who travelled along the east and west coasts of peninsular India by foot or in *cattumarams* is reported to have set foot in Pondicherry during his mission of conversion sometime in 1545, i.e., only 47 years after the arrival of the Portuguese in India in the year 1498.

A map published in 1698 illustrating the voyages of **Dr. Fryer** showed Pondicherry, besides Tuticorin, Nagappattinam, Sadraspatinam, Mylapore and Madras.³ The famous map of **d' Anville**, the first drawn scientifically and brought out in 1752, also showed the city of Pondicherry.⁴ The map of **Rennel James** published in the year 1788 in his "Memoir of a map of Hindostan" also prominently identified Pondicherry on the East Coast. The unknown author of '**Divers Mémoires**' (c. 1766) suggested the following improvement in the route between Mahe and Pondicherry on the map of **Indes Orientales**. "While drawing on a map the route from Mahe to Pondicherry based on the statement of a Brahmin who had travelled on this route a hundred times, I felt that the route as reported to me could be reduced, particularly on the route from Mahe to Taniur or Tanur on account of its several mountains and rivers, than on the rest of the route from Taniur to Pondicherry, because one had to travel on road across a country which was more compact."⁵

François Martin, the founder of modern Pondicherry, has left an interesting account of the road journey he undertook in 1681 from Pondicherry to Surat.⁶ **Anquetil Duperron**, in his introduction to '**Zend Avesta**', gives a detailed account of his extraordinary journey from Bengal to Pondicherry in 1757, via [Burdwan, 'Balasore, Cuttack, Ganjam and Machilipatnam. He has left also the details of his journey from Mahe to Goa on the West Coast.⁷ Jean Law de Lauriston' gives details of his journey from Kasim Bazaar to Delhi performed during the same period with minute details of places of halt....from Kasim Bazaar to Patna, from Patna to Allahabad, from Allahabad to Lucknow, from Allahabad to Delhi, from Chatterpur to Patna and finally from Mirzapur to Pondicherry via Nagpur and Cuddappah.⁸

Interestingly the city of Pondicherry, built within the limits of a rampart surrounding three sides of the town, was provided with four gateways called '**Porte de Goudelour**' facing south, '**Porte de Villenour**' and '**Porte de Valdavour**' facing west and '**Porte de Madras**' facing north. The roads emanating from the gateways were appropriately named as Cuddalore road, Villianur road, Valudavur road and Madras road, establishing links with the entire sub-continent.

Roads :

We have very little information about the system of roads in Pondicherry prior to the arrival of the French. In the XVIII century the **Grand Voyer** or the Chief Surveyor was the official responsible for roads. Although the functions of the **Grand Voyer** were defined by the **arrêt de règlement du Conseil Supérieur** of 15 January 1770, its details are not available.⁹ Unlike this regulation which was much restricted in its scope, the **Règlement provisoire pour la voirie, les eaux et forêts de Pondichéry et dépendances** (Provisional regulations on highways, waters and forests in Pondicherry and its dependencies) of 20 June 1778 dealt with all thoroughfares, both highways and other types of roads and covered all the dependencies of Pondicherry.¹⁰ The **Service de la Voirie** (Road Service) was apparently the responsibility of the **Grand Voyer**, functioning under the immediate control of the Administrators (the Governor and the **Ordonnateur**). The **Grand Voyer** who was assisted in his task by two **maitre-maçon** (maistries) and four **pions** was responsible for the proper alignment of streets, their maintenance, water courses, laying of new roads and planting of trees on road sides, etc. He also looked after bridges, canals and sewage works within the limits of the town. He prevented the despoliation of road-side trees and the forest of Kalapet. Neither new constructions nor renovation of old buildings could be carried out by anyone without the consent of the **Grand Voyer**. The **Ingénieur-en-chef**'s concurrence was necessary for carrying out sophisticated items of works. Thus the **Grand Voyer** could not, for example, undertake the construction of new embankments, bridges and canals without the approval of the **Ingénieur-en-chef** as such items of work affected the security of the area in those days.

Although the regulations underwent some minor changes after 1816, they remained essentially the same for some years.¹¹ In 1825 the post of **Grand Voyer** was abolished and all his functions were distributed among three different departments viz., **Service du Domaine**, **Service de Génie** and **Service de Police**.¹² The **Service de Génie** was responsible for repairs and maintenance of thoroughfares in the town, works relating to canals, ponds and embankments, irrigation, road alignments, road-side trees, etc. The functions of rural police and such other matters connected with irrigation, distribution of water, protection of road-side trees and disposal of their usufructs fell within the realm of **Service du Domaine**. The maintenance of order and cleanliness in streets, prevention of trespass by animals as well as demolition of dilapidated buildings fell to the lot of the police.

Already by 1827 we come across a set-up known as **Service des Ponts et Chaussées** (Service of Roads and Bridges) placed under the control of an engineer responsible for the execution of works.¹³ In 1838 an attempt was made to consolidate the various regulations drawn up in the past.¹⁴ As per the **arrêté** of 10 April 1838, **Service des Ponts et Chaussées** came under the control of an **Ingénieur Colonial** who was responsible for all construction works, maintenance and repairs of public buildings and roads.* He dealt with all kinds of encroachments and looked after the maintenance of all tanks, ponds, canals as well as bridges constructed by the administration.

In due course it was felt necessary to determine the mode of execution and maintenance of public works resulting in the **arrêté** of 1866. The following year, the **Service de Ponts et Chaussées** underwent a major reorganisation.¹⁵ Although the **Service** continued under the overall direction of an '**Ingénieur**' it was divided into four branches responsible for (1) construction and maintenance of public buildings, quays and bridges, (2) irrigation works, (3) roads including bridges and (4) workshop, each branch placed under the management of one or several '**Conducteurs**' who also functioned as heads of the regional units. Mention must be made here of the **arrêté** of 14 September 1871 which was a significant piece of legislation, in that it sought to regulate urban development, road construction, maintenance of foot-paths, unauthorised constructions, road-side projections, protection of public wells, etc. Sometime in the XIX century a sketch of the road network is understood to have been drawn up under the direction of **Rabourdin** and **Lamairesse**, two engineers.¹⁶

In 1900 the whole set-up was reorganised into **Service des Travaux Publics** and the responsibilities of the personnel at various levels were fixed. As usual, roads remained under its control. This arrangement continued even in 1943 when the **Service des Travaux Publics** was in charge of drinking water supply, roads, distribution of power, radio receivers, construction of embankments, planting of trees on road-sides, major irrigation, construction and maintenance of coastal works, railways, ports, street alignments, mines,

* Roads fell under two categories, viz. **Grand' voirie** and **Petite voirie**. **Petite voirie** was again divided into two groups, viz. **voirie urbaine** and **voirie rurale** (urban and rural). While urban roads were the concern of the Police, rural roads remained under the care of **Service du Domaine**.

airfield, supply of petrol, archaeological excavations, etc., and exercised control over **Ecole des Arts et Métiers**, **Syndicats Agricoles** and **Service météorologique**.¹⁷ The Directorate of Public Works, as successor to **Service des Travaux Publics** is now in charge of roads.

When in the XIX century the road transport system came to be modernised, following the innovation of the motor-car by turning the old transport system into a dynamic organisation, more attention was paid to the improvement of roads and their maintenance.

In the year 1914, the total length of road networks under the control of the government was as follows :^{*18}

(In kilometres.)

Region			Metalled	Simple earth work	Earthen road	Total
Pondicherry	..	..	108.216	42.987	32.440	183.643
Chandernagore	..	..	5.250	—	—	5.250
Karaikal	..	..	38.562	25.235	0.155	63.952
Mahe	..	..	2.206	9.350	—	11.556
Yanam	..	..	3.769	—	—	3.769
			158.003	77.572	32.595	268.170

In 1932, Bourgoïn, an engineer after travelling around the French settlements in India reported that the roads were drawn up according to a defective plan, with narrow pavements and improper metalling. (*“Les routes qui composent les réseaux routiers des Etablissements français de Pondichéry et de Karikal ont en général, un tracé en plan défectueux des largeurs d’emprise et de chaussées trop étroites et des revêtements en état médiocre sinon mauvais.”*¹⁹) The same year, it appears, due to the persevering endeavour of Senator Doctor Eugène le Moignic,

* It does not cover municipal roads.

the French Government agreed to place at the disposal of the Pondicherry administration the sum of Rs. 4,26,000 being the indemnity paid by the British Government to the French Government as compensation for not manufacturing salt in the French settlements. This enabled the Administration to provide sufficient funds for public works.²⁰ From 1933, for four years, the reconstruction work was undertaken without any interruption at an estimated cost of Rs. 8,00,000. During this period, roads with a minimum width of 5m. made up of calcareous foundation and an asphalt surface replaced all the narrow roads of 3.50 metres width. As part of the works undertaken after 1933, the following roads were improved in Pondicherry region :

1. Boulevard, rue Bussy, rue Dupleix, rue Madras, rue Vaithikuppam.
2. Cuddalore road.
3. Villiyanur road.
4. Valudavur road upto Gudappakkam.
5. Tindivanam road.
6. Gudappakkam—Villiyanur road.
7. Muttiyalupettai road.

The roads covered in all a distance of 59 km.²¹ A study of the road map drawn in 1937 will show that the eastern half of Pondicherry region was provided with asphalted roads during 1933–37. On the other hand, on the western portion there were no metalled roads which could be considered as all-weather roads. Thus the area covering Karaiyamputtur, Nettappakkam, Tirubhuvanai, Sorappattu, Kunichampattu, Aranganur, etc. representing more than 1/3 of the territory remained isolated from Pondicherry. Even the economy of the territory was subjected to a lot of strain. The crops from these villages could not be moved to the market centres in time. It was also found very difficult for the administration to exercise proper control over officials working in these villages in all respects. But the construction of roads in the western part of the region was not found quite feasible as these roads had to cut across British territories. With a view to overcoming these difficulties, the French Government entered into an agreement with the British.²² In accordance with the terms of this agreement, the British Government agreed to pay to

the French administration an amount equal to that which was spent for the maintenance of roads and also to bear half of the expenditure on new works. As a result of this agreement, the following roads were proposed to be constructed :

- (a) Villupuram road (18.300 km.)
- (b) Nettappakkam road (14.600 km.)
- (c) A 23.500 km. long road on the frontiers connecting all the enclaves on the west.

The Villupuram road which started from the Cuddalore road at 5.50 km. passed Odiyambattu to run south of Villianur. Then it crossed Gingee river and passed between Arougour (Ariyur) and Pangur (Panagur) to enter the British territory and then the French territory of Tirubhuvanai to reach the villages of Tiruvandarkovil and Madagadippattu after crossing the railway line at Kandamangalam.

The Nettappakkam road which originated from the above said Villupuram road at its crossing over river Gingee, winded through Mangalam, Pudukkuppam and Embalam, then entered South Arcot territory and then passed through the enclave of Manakuppam, then crossed the Nettappakkam enclave from east to west to terminate at Madukkarai.

The 'frontier road' assured communication among all the enclaves on the west. It started from Kunichampattu in the north, joined Valudavur road about hundred metres away from Tirukkanur, then passed through Sombattu, Mannadippattu and the common territory of Pambai Ar (Vadhanur) where it touched the Villupuram road, then came out of the enclave of Nettappakkam, after crossing the Kuduvaigar (Chinna Sellengal)* to run north to south across Nettappakkam enclave from Suramangalam to Pandacholanallur via Nettappakkam and Kariyamanikkam. The road terminated in the enclave of Karaiyamputtur near the bank of Bangara Vaykkal.

* Sellengal is a single channel upto Villupuram—Siruvantadu road and below the bridge it branches off into two channels. The northern bund is known as Chinna Sellengal while the southern bund is known as Periya Sellengal and runs in Tamil Nadu limits. In the lower reaches it is known as Kuduvaigar.

While the asphalted pavements in Pondicherry were more or less good for traffic, metalled roads were in a poor state. The inherent sandiness and improper maintenance left the earthen roads unmotorable. However, some attention seems to have been paid for the maintenance of asphalted pavements after 1939.²³ As for the maintenance of roads which passed intermittently between the French and the British territory, an agreement was signed in 1939 between the French and the British. The agreement came into force on 1 April 1939.²⁴

As per the agreement, the South Arcot District Board had to undertake the following works before 31 December 1940 :

- (i) Strengthening of Cuddalore road from Reddichavadi upto the southern limit of Pondicherry territory over a width of 4 m. and 4,729 m. length.
- (ii) Strengthening of Marakkanam road over a width of 4 m. and 4,200 m. length.

In addition, the South Arcot District Board had to maintain—

- (i) Cuddalore road between Reddichavadi and the southern boundary of Pondicherry settlement.
- (ii) Marakkanam road in the French territory of Kalapet,
- (iii) Mailam road in the French territory to the north of Sedarappattu,
- (iv) Papanapeth—Valudavur road near Kodattur and Tirukkanur,
- (v) 3 furlongs of the Pakkam road from the Villupuram—Pondicherry road junction to the southern limit of the French territory.

On the other hand the French had to carry out the following works before the same date :

- (i) Strengthening and asphaltting Cuddalore road over a width of 5 m. and a length of 2,600 m,
- (ii) Strengthening Pondicherry—Villupuram road over a width of 4 m. and a length of 5,600 m,
- (iii) Strengthening and asphaltting Pondicherry—Valudavur road over a width of 5 m. and a length of 1,100 m.

The French had also to maintain the following roads :

- (i) The frontier roads (Karaiyamputtur, Panaiyadikuppam, Sorappur, Pandacholanallur, Nettappakkam, Kariamanikkam, Suramangalam, Nallur, Madagadippattu) in the British territories of Sorappur and Kuduvaigar to the south of Nallur.

So far as Karaikal region was concerned the problem was simpler, as it was a compact area. The coastal Nagur—Poraiyar road running north-south linked Tirumalarajanpattinam, Niravi, Karaikal and Kottuchcheri

Communes. This road was metalled during 1933-1936. Four auxiliary roads viz. Nedungadu road, Ambagarattur road, Arasalar road and Tirunallar road took off from this road. The Nedungadu road which started off from Karaikal town was the longest among the auxiliary roads.²⁵ As for Mahe and Yanam, the total length of roads open to traffic was not less than 15 km. prior to merger.²⁶

There were a number of watchmen (*cantonniers*) to maintain the roads properly. In 1933, there were 15 head watchmen and 68 watchmen in Pondicherry; seven head watchmen and 32 watchmen in Karaikal. In 1942, 11 head watchmen, 29 watchmen and 33 road labourers were on the roster in Pondicherry and five head watchmen and 11 watchmen were entertained in Karaikal.²⁷

The administration had also been paying some attention to the growing of trees on road-sides. In 1940 more than 5,000 saplings were planted: 4,520 in Pondicherry and 530 in Karaikal.²⁸ Again in the year 1944 more than 2,000 saplings specially brought from Yercaud were planted along the roads and canals in the Territory.²⁹

Progress since 1954 :

Roads in this Territory fall under two categories viz., Public Works Department roads and Municipal or Commune roads. At the time of merger in November 1954, the territory was provided with a network of 549.85* km. of roads as detailed below :³⁰

(Length in km.)

Types of roads				Government roads	Commune roads	Total
Surfaced roads :						
Cement concrete	..	..	..	1.61	—	1.61
Black top	..	..	..	52.28	—	52.28
Water bound macadam	..	..	..	107.82	—	107.82

Surfaced roads :

* This is said to include 179.25 km. of Municipal roads (82.77 km. in Pondicherry and 96.48 km. in Karaikal) taken over by the Public Works Department from the *Mairies*. Some confusion in the figures must, however, be noted here. While Vol. I of the Third Five Year Plan gives the total length of roads in the Territory as 550 km. Vol. II of III Five Year Plan gives the total in 1960-61 as 524.8 km. which is 25.2 km. less. The same document fixed the target for 1965-66 at 495 km. Thus the target for 1965-66 was even less than the road length which actually existed in 1960-61.

(Length in km.)

Type of roads	Government roads	Commune roads	Total
Unsurfaced roads :			
Soled	.. .. .	—	—
Earthen	.. .. . 144.14	244.00	388.14
Total	.. .. . 305.85	244.00	549.85

The total length of Government roads (P.W.D.) as on 31 March 1974 was as shown below :

(Length in km.)

Type of roads	Pondicherry	Karaikal	Mahe	Yanam	Total
State Highways	C.C. 0.280	—	—	—	0.280
	B.T. 14.030	—	—	—	14.030
	W.B.M. —	—	—	—	—
Major District roads	C.C. 2.270	—	—	—	2.270
	B.T. 56.305	48.031	1.360	—	105.696
	W.B.M. —	—	—	—	—
Other District roads	C.C. —	—	0.500	—	0.500
	B.T. 127.190	19.818	3.160	13.846	164.014
	W.B.M. 11.602	9.520	—	—	21.122
	Others 0.484	—	—	—	0.484
Village roads	Motorable 20.440	10.000	1.450	—	31.890
	Non-motorable —	—	—	—	—
Total	232.601	87.369	6.470	13.846	340.286

C.C. = Concrete. B.T. = Black topped. W.B.M. = Water Bound Macadam.

It is apparent that the total length of Government roads (P.W.D.) has increased from 305.85 km. to 340.286 km. The length of concrete roads increased from 1.61 km. to 3.05 km. The length of black topped roads increased from 52.28 km. to 283.740 km. The length of water bound macadam roads declined from 107.82 km. to 21.122 km.

The investment for road development from 1954 to 1974 i.e. till the end of the IV Plan was as follows :

(Rs. in lakhs)

Plan period		Actual expenditure
I Plan	..	10.80
II Plan (1956-61)	..	38.03
III Plan (1961-66)	..	52.94
Annual Plans (1966-69)	..	33.01
IV Plan (1969-74)	..	127.81

Thus the total investment towards road development between 1955 and 1974 amounted to Rs. 262.59 lakhs.

The increase in road length was only marginal during the II Plan period the main emphasis having been on converting the unsurfaced roads into surfaced ones. In 1961, the road length worked out to 101 km. per 100 sq.km. of area in the Territory, while it was only 34 km. for Tamil Nadu. But road length in relation to population was 1.2 km. per 1,000 in Pondicherry and 1.9 for Karaikal, while it was 1.3 for Tamil Nadu. During the III Plan period, the conversion of the main fair-weather roads into all-weather roads, the bridging of important rivers and the provision of railway level crossings engaged the attention of the administration. Further, since the financial position of the communes did not permit them to carry out repairs on the roads maintained by them, the Government itself undertook to improve these roads during the III Plan period.

Commune roads :

In 1954, the total length of commune roads was 244. km.* The road length seems to have declined to 206.45 km. in 1965-66.³¹ However according to the Report of the Commission constituted to recommend measures for the augmentation of financial resources of municipalities and for the improvement of service conditions of municipal employees, the total length of roads under local bodies was 244 km. It would mean that the length of municipal roads had not increased in the Territory since 1954. This impression seems to be misleading at least for one reason, because several colonies have sprung up since 1954, around the town where several new roads have been laid out by the municipalities. This should have increased the length of roads under municipalities although precise data are not available.

According to the Directorate of Pilot Research Project in Growth Centres, most rural roads are in a bad condition as the local bodies have no resources to take up road improvement programmes. The Government sanctioned to every municipality or commune panchayat compensation for the abolition of toll on the basis of the average receipt during the three years preceding the introduction of the Motor Vehicles Taxation Act, 1966. There was no scope to revise the compensation being paid to local bodies. With due regard to the limitation of the municipalities, a decision was taken to enable the Public Works Department to take over roads under the local bodies, whenever buses were introduced in any of the municipal roads.

Some roads within the municipal limits of Pondicherry and Karaikal towns were withdrawn from the control of the Municipal Councils under the provisions of the Pondicherry Municipalities Act, 1973 and handed over to the Public Works Department with effect from 2 November 1974.³² The same day, several other roads under the control of the Commune Panchayat Councils also were transferred to the control of the Public Works Department.**³³

* According to the Third Five Year Plan, Vol. I, p. 52.

** The length of roads so taken over by the Public Works Department is not mentioned in the order.

Sugar-cane development cess for road construction :

The sugar industry in Pondicherry had been contributing its share since 1963-64 towards development of roads in Pondicherry region through the sugar-cane development cess meant to be utilised for improving the roads leading to sugar-cane fields, mostly located in Mannadippattu and Nettappakkam Communes. Although the Territory has been in receipt of sugar-cane development cess from the year 1963 onwards, the amount was being collected in the Territory only from 1967 onwards. Between 1963 and 73, a sum of Rs. 56,20,669.61 was credited to the account of Pondicherry. The annual programme for road development is finalised by the Sugar-cane Advisory Committee (first constituted in 1966) and forwarded to the Public Works Department for implementation. Upto 30 September 1975 a total length of 64 km. of roads was improved at an expenditure of Rs. 23,51,462.59. The agency responsible for the maintenance of sugar-cane cess roads in the Territory had not been decided upon.

Classification of roads :

Roads in the Territory are classified as State Highways, Major District Roads, and Other District Roads. Prior to merger all these roads were called 'Routes Coloniales'. Apart from the above categories there are also village roads under the control of the Public Works Department.

Sl. No.	Name of roads	Length in km.
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PONDICHERRY REGION**I. State Highways**

1.	R.C. 2 Cuddalore Road	10.570
2.	R.C. 10 Ellupillaichavadi Road	0.640
3.	R.C. 15 Karamanikkuppam Road	1.080
4.	R.C. 24 Laspettai Road	2.020

Sl. No.	Name of roads	Length in km.
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II. Major District Roads

1.	R.C. 1 Boulevard	5.259
2.	R.C. 2 Cuddalore Road	2.117
3.	R.C. 3 Villiyannur Road	9.417
4.	R.C. 4 Valudavur Road	16.226
5.	R.C. 5 Mahatma Gandhi Road	3.506
6.	R.C. 6 Tindivanam Road	2.360
7.	R.C. 14 Mill Road	1.259
8.	R.C. 15 Karamanikkuppam Road	0.660
9.	R.C. 16 bis Villiyannur Round Road	1.086
10.	R.C. 24 Laspettai Road	2.092
11.	R.C. 29 Villupuram Road	14.593

III. Other District Roads

1.	R.C. 7 Suttukanni Road	7.700
2.	R.C. 8 Puliansalai Road	0.966
3.	R.C. 9 Kusappalaiyam Road	0.768
4.	R.C. 10 Ellupillaichavadi Road	0.604
5.	R.C. 11 Muttirapalaiyam Road	1.386
6.	R.C. 12 Sanyasikuppam Road	10.828
7.	R.C. 13 Vadanur Road	7.885
8.	R.C. 14 bis Bharathi Mill Road	0.490
9.	R.C. 16 Gudappakkam Road	4.488
10.	R.C. 17 Murungappakkam Road	6.416
11.	R.C. 18 Villiyannur—Bahur Road	10.421
12.	R.C. 19 Embalam—Madukkarai Road	18.565
13.	R.C. 20 Abhishekapakkam Road	7.496
14.	R.C. 21 Frontier Road	28.993

Sl. No.	Name of roads	Length in km.
15.	R.C. 22 Tuttippattu Road	10.270
16.	R.C. 23 Vayittikuppam Road	0.922
17.	R.C. 25 Nonanguppam Road	0.484
18.	R.C. 26 Virampattinam Road	2.005
19.	R.C. 27 Kirumambakkam Road	4.600
20.	R.C. 28 Kanniyakovil Road.. .. .	3.661
21.	R.C. 30 Kilur Road	7.094
22.	R.C. 31 Karaimesu Road	0.774
23.	R.C. 32 Tirukkanur Road	2.460

IV. Village Roads

1.	Tirubhuvanai Road	0.880
2.	Pillaiyarkuppam Road	1.000
3.	Kunichampattu Road	1.200
4.	Siruvantadu Road	5.200
5.	Kozhipakkam Road	2.110
6.	T. N. Palayam Road	3.050
7.	Irulansandi—Sitheri voikal Road	1.400
8.	Kuruvinattam Road	3.600
9.	Sornavur Road	2.000

KARAIKAL REGION

I. State Highways

1.	Karaikal—Nagore Road	10.816
2.	Karaikal—Poraiyar Road	10.698

II. Major District Roads

1.	Karaikal—Ambagarattur Road	14.559
2.	Karaikal—Nedungadu Road.. .. .	10.130
3.	Annavasal Road	1.828

Sl. No.	Name of roads							Length in km.
III. Other District Roads								
1.	Niravi I Road	..	..	..	..	..	..	2.330
2.	Niravi II Road	..	..	..	..	..	..	1.670
3.	Tittachcheri Road	..	..	..	..	..	..	1.260
4.	Lemaire Road	..	..	..	..	..	..	1.098
5.	Seshamulai Road	..	..	..	..	..	..	9.520
6.	Beach Road	..	..	..	..	..	..	1.820
7.	Sorakkudi Road	..	..	..	..	..	..	4.540
8.	Akalanganni Road	..	..	..	..	..	..	2.480
9.	Nallattur Road	..	..	..	..	..	..	4.640
IV. Village Roads								
1.	Dharmapuram Road	..	..	..	..	..	..	1.790
2.	Karaikalmedu Road	..	..	..	..	..	..	1.800
3.	Kottuchcheri-Vadamattam Road	..	..	..	..	..	..	4.930
4.	Kottuchcheri Main Road	..	..	..	..	..	..	1.530
MAHE REGION								
I. State Highways								
1.	Main Kozhikode Road	..	..	..	..	..	..	1.534
II. Major District Roads								
								Nil.
III. Other District Roads								
1.	Kallayi-Pandakkal Road	..	..	..	..	..	..	6.885
2.	Paral-Chockly Road	..	..	..	..	..	..	1.480
3.	Vayalam-Pandakkal Road	..	..	..	..	..	..	9.914
4.	Boulevard Road	..	..	..	..	..	..	1.817
5.	Railway Station Road	1.011
6.	Jail Road	0.290

Sl. No.	Name of roads	Length in km.
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IV. Village Roads

1.	Mulakkadavu Gopalam Road	1.747
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YANAM REGION

I. State Highways

Nil

II. Major District Roads

Nil

III. Other District Roads

1.	Drakshrama Road	1.361
2.	Thiagaraja Road	0.508
3.	Jail Road	0.737
4.	Vishnalayam Road	0.656
5.	Bacque Road	0.149
6.	Cemetery Road	1.110
7.	Ferry Road	0.500

IV. Village Roads

1.	Madhumula Road	1.450
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Maintenance of roads :

The maintenance and construction of roads in the Territory is being attended to by two agencies viz., the Public Works Department and, Municipalities. So far as the Public Works Department was concerned, the work was attended to by the Roads Subdivision headed by an Assistant Engineer who was assisted by three Junior Engineers. Another subdivision looked after the investigation of all road works in the Territory. A full-fledged Highways division was proposed to be formed in the Public Works Department, during the V Plan to deal with all problems of road, planning, development and construction in the Territory. The maintenance gang consisted of 132 gangmen with road inspectors to supervise the work of gangmen. About a dozen maistries were in charge of road improvement works.

It is gathered that out of a total distance of 22 km. of the Cuddalore double lane road, about 13.8 km. are maintained by this Administration. Out of a total length of 40 km. of the Villupuram double lane road, 24.5 km. are maintained by this Administration. The Tindivanam double lane road for a distance of 5.7 km. is also maintained by this Administration. A length of 3.5 km. of the Marakkanam road is maintained by this Administration.

It is to be noted that the Boulevard around the town of Pondicherry and the three main roads in Pondicherry town viz. rue Dupleix (now Jawaharlal Nehru Street), rue Madras (now Mahatma Gandhi road) and rue Bussy (now Lal Bahadur Shastri Road) are maintained by the Public Works Department.

Road Development Policy :

As a matter of general policy, unsurfaced roads were progressively converted into surfaced roads and water bound macadam roads were converted into bitumen roads. In 1967 the National Council for Applied Economic Research called upon the administration to conduct a road census at the earliest in order to work out the investment for increasing the capacity of individual sections of roads, for only from such data, it said, the investments on specific sections could be worked out. In fact, the Techno-Economic Survey suggested an investment of Re. 1 crore mainly for better surfacing of 110 km. at a cost of Rs. 60 lakhs and Rs. 40 lakhs for giving new links.³⁴

The Planning Commission's approach to road development in the country during the IV Plan was to form regional plans for the four regions in the country. The regional plan proposed for the southern region included Tamil Nadu, Kerala, Karnataka, Andhra Pradesh and the Union Territory of Pondicherry. In 1972 the Road Investigation Wing of the Public Works Department prepared a Road Development Plan estimated to cost Rs. 65.75 lakhs. This included proposals to improve 138.45 km. of village roads (both earthen and soled) as well as 34.2 km. of slum roads (referred to as cherry roads) to fall in line with the Minimum Needs Programme. In fact under the V Plan, the emphasis was on the development of rural roads which constituted the essential infrastructure for rural development, besides removing deficiencies in the existing road systems by improving the surfaces, poor geometrics sub-grades etc. by reconstructing and strengthening weak bridges and culverts and by widening the existing urban roadways. Those roads which are under the control of

Municipalities and Commune Panchayats are to be converted into fair-weather roads in order to link all the villages with the main roads. The Fifth Plan outlay was of the order of Rs. 2 crores.

According to the Directorate of Pilot Research Project, "problems relating to land acquisition and constructing roads in Tamil Nadu territory falling in-between Pondicherry areas affect the implementation of road development programmes." Lack of adequate data and the absence of inventory on roads, culverts and bridges are also said to affect the formulation of schemes for road development.³⁵

II. Public Transport

Vehicles and conveyance :

In the days of Anandarangapillai, the citizens of Pondicherry used such modes of conveyance as the *dholi*, palanquin (*pallakku*), horse, elephant, camel, besides horse drawn and bullock drawn carts known as '*garis*'. The *dholis* were preferred to carry the old, the sick and the wounded. The *pallakku* was the conveyance of the privileged rich as the traveller inside the palanquin could even sleep without being disturbed by jerks. Horses were used for quick travel. They were much in use for purposes of war. Members of the royal family made their journey on elephants, camels or in palanquins. Some of the very rich citizens of Pondicherry had elephants with them. For long distance travel and for carrying heavy loads and *dak*, camels were used.

A journey in palanquin from Madras to Pondicherry was accomplished in about three days.³⁶ The distance from Pondicherry to Villianur was covered in two and a half hours.³⁷ Journey by '*garis*' might continue for even sixty days at a stretch covering 12 to 18 '*lieues*' per day.³⁸ Horses from various countries like Australia, Arabia etc., were brought to Pondicherry. These horses were put to carriages in which the ladies of rich families went on rides along the beach in the evenings. In course of time, the palanquins and the horse drawn vehicles were abandoned and the light vehicles called '*pousse-pousse*' became popular at the beginning of the twentieth century. These, known also as Malabar vehicles, were used mostly by the middle class.³⁹ This coach was pushed by two persons at the rear and pulled by one person in front.⁴⁰ The hand-pulled rickshaw also made its appearance in due course and its popularity could be ascribed to Pondicherry's close association with Indo-China. The very poor men pledged themselves as rickshaw pullers for a small consideration. The hand-pulled rickshaws are found only in towns.

The cycle rickshaws made its appearance after World War II and are now the most popular mode of conveyance for short distance travel. A large number of people who flocked to Pondicherry after merger in search of employment had finally settled down to rickshaw pulling. Their families in due course found shelter on the pavements. The women folk very often sought employment as house-maids. Some thrived on bootlegging of illicit arrack, especially for the large number of rickshaw pullers in the town. Recently some ex-service-men have been assisted by the Soldiers', Sailors' and Airmen's Board, Pondicherry to introduce a few autorickshaws in the town.

Public transport :

With the onset of automobiles at the end of XIX century, the old modes of transport slowly went off the roads and the motor-cars gradually took the roads. The circulation of automobiles in the establishment came to be regulated for the first time by the *arrêté* of 24 June 1912.⁴¹ There were then only 16 automobiles of which one was a lorry. Only 12 persons held driving licences.⁴² Between January 1924 and 31 December 1939 as many as 1674* motor-cars were registered in the Territory.⁴³ The number of vehicles in circulation in January 1941 is given below :⁴⁴

Type of vehicles		Pondicherry	Karaikal	Chander-nagore	Mahe	Total
Automobiles	..	210	19	87	—	316
Mini automobiles	..	56	29	6	6	97
Lorries	..	40	2	44	3	89
Motor-cycles	..	4	—	6	—	10

The *pousse-pousse* disappeared yielding place to the three wheeled cycle rickshaws. As for the carts, they are still seen in the streets. They are mostly used in villages for agricultural purposes (transport of crop, manure, etc.) and to bring firewood to the town. In Pondicherry, cycle rickshaws

* Pondicherry—874, Karaikal—381 and Chandernagore—419.

occupy a prominent place as conveyance next only to town buses to carry persons from one place to another. While motor-cycles and scooters are used by the well-to-do, cycles are used by others. As for the horse drawn vehicles, except a few used by the vendors to bring their produce to the market from the surrounding areas and especially from Ariyankuppam, there is no circulation of such vehicles in the town.

At the time of merger, there were regular transport facilities connecting Pondicherry to various towns in Tamil Nadu and Karnataka. There were regular bus services from Pondicherry to Cuddalore, Panruti Chidambaram, Tiruvannamalai, Tindivanam and Bangalore, and also from Karaikal to Nagore, Poraiyar and Kumbakonam. Apart from these inter-state routes, buses also plied between Pondicherry and Villianur and between Karaikal and Nallattur. Mahe region was served by buses plying between Tellicherry—Badagara and Tellicherry—Kuttiady, both of which touched Mahe en route. Yanam region was connected to Kakinada town by a bus service plying four times a day in each direction.⁴⁵

After merger:

With merger, the Territory could no longer remain isolated from the rest of the country. The growth of its traffic was no more inhibited by strict customs regulations and border restrictions. The town soon established contacts with other commercial centres of the country. As a cumulative effect of all these changes, the traffic of goods and vehicles underwent a sea-change with the volume of traffic showing steady increase.

It may be recalled here that the subject of 'motor transport' including the work of registration of motor vehicles, issue of licences for drivers and conductors, permits for transport vehicles, etc., was originally attended to by the Public Works Department. With effect from 12 February 1955, the subject was transferred to the Police Department with the Superintendent of Police taking over as Secretary of the State Transport Authority and Registering and Licensing Authority. The Motor Vehicles Act, 1939 and the Delhi Motor Vehicles Rules, 1940 were extended to this Territory in 1959.

The number of all types of motor vehicles registered in the Territory increased from 241 in 1956 to 1,106 in 1961. The number of buses registered in the Territory increased from 25 to 86 between 1956 and 1962 i.e. an increase of 244 per cent in six years. The number of lorries increased from 28 to 141 recording an increase of nearly 403 per cent. In inter-state traffic, the ratio of the number of buses and lorries of Pondicherry to those coming in from outside was then of the order of 1 to 3. 46

The steady increase in the number of motor vehicles in the Territory however, made it necessary to set-up a separate Transport Branch on the pattern in vogue in Tamil Nadu. A Regional Transport Officer was therefore appointed on 14 September 1966, taking over charge from the Superintendent of Police. The State Transport Authority was reconstituted with the Chief Secretary as Chairman and the Regional Transport Officer as its Secretary. The Regional Transport Officer, Pondicherry became the Registering and Licensing Authority under the Motor Vehicles Act and the Delhi Motor Vehicles Rules for Pondicherry, Mahe and Yanam regions. The Superintendent of Police, Karaikal, became the Registering and Licensing Authority for Karaikal region. The Principal District and Sessions Judge constituted the State Transport Appellate Tribunal. The Office of the Regional Transport Officer started functioning independently with effect from 1 April 1967. 47

The Pondicherry Motor Vehicles Taxation Act, 1966 (4 of 1966) which came into force on 1 July 1966 sought to rationalise the rates of tax till then in force in the Territory. The Motor Vehicles (Pondicherry Amendment) Act, 1966 (Act 16 of 1966) was passed to amend section 48 of the Motor Vehicles Act, 1939 so as to empower the State Transport Authority to make alterations in routes. The Pondicherry Motor Vehicles Taxation Act, 1966 extending the Madras Motor Vehicles Taxation Act was challenged in the High Court by a batch of bus operators of the Territory. Following the writ filed by the bus operators, the collection of tax under the Pondicherry Motor Vehicles Taxation Act, 1966 was stayed by the Madras High Court. Subsequently a self-contained Act known as the Pondicherry Motor Vehicles Taxation Act, 1967 (5 of 1967) was introduced repealing the Pondicherry Motor Vehicles Taxation Act, 1966. The provisions of this Act which received the assent of the President on 16 October 1967 came into force with retrospective effect from 1 July 1966. The writ petition filed by the bus operators was,

however, dismissed subsequently. The saving clause of the Pondicherry (Application of Motor Vehicles Act) Order, 1959 was removed with the passing of the Pondicherry (Application of Motor Vehicles Act) Order (Amendment) Act, 1968 with effect from 16 May 1968 which brought in an additional revenue of Rs. 95,000 to the Territory. The rates of taxes for motor-cars and stage carriages were marginally increased with effect from 1 April 1970 in accordance with the provisions of the Pondicherry Motor Vehicles Taxation (Amendment) Act, 1970. A proposal was mooted in 1970 to levy a surcharge on passengers and goods for which purpose the Pondicherry Motor Vehicles (Taxation on Passengers and Goods) Bill was proposed to be introduced. Instead of levying two distinct types of taxes on motor vehicles it was subsequently decided to increase the rates of taxes on passengers and goods so as to realise the revenue anticipated under the original proposal. The proposed legislation was therefore abandoned and the rates of tax on passengers and goods were increased with effect from 1 July 1974. The Pondicherry Motor Vehicles Taxation (Amendment) Act, 1973 (1 of 1974) assented to by the President on 11 March 1974, raised the tax on certain categories of goods vehicles.

Inter-state agreements :

The Government entered into arrangements with the neighbouring States of Tamil Nadu, Andhra Pradesh, Kerala and Karnataka to exempt the public service vehicles of this Territory covered by special permits from the payment of tax due to those States.⁴⁸ In accordance with an agreement reached between the Government of Kerala and the Pondicherry Administration, stage carriage services came to be operated in the following three inter-state routes :

1. Pallur—Mahe (Via) Kuttiyadi.
2. Pandakkal—Mahe—Tellicherry (via) Pallur.
3. East Pallur—Tellicherry (via) Mahe.

Under the agreement, the State Transport Authority of Pondicherry was permitted to issue permit for one stage carriage in each of the three routes. These permits were, however, to be countersigned by the State Transport Authority of Kerala for purposes of single point tax.

In continuation of the previous agreements, a new agreement was reached with the Government of Tamil Nadu in 1966 on the question of payment of single point tax in respect of stage carriages, goods vehicles and contract carriages. A reciprocal agreement was entered into between the Governments

of Andhra Pradesh and Pondicherry under which stage carriages of both the states came to enjoy the single point tax benefit. Following this inter-state agreement on single point tax between the Governments of Tamil Nadu and Pondicherry, the operators of Pondicherry were required to pay tax only in this Territory. As a result of another agreement reached with the Government of Kerala on 1 July 1968, all Kerala bound buses, lorries and taxis were allowed to ply through Mahe area without paying any tax to this administration and *vice versa*. Negotiations were initiated in 1969 with the Government of Andhra Pradesh for the suspension of tax levied for inter-state vehicular movement.

An agreement was reached on the South Zone Permit Scheme between the Governments of Andhra Pradesh, Kerala, Maharashtra, Karnataka, Tamil Nadu, Pondicherry and Goa on 1 July 1975. In deference to the suggestion made by the Ministry for Transport and Communication, this administration put forth the claim to be a member in the South Zone Permit Scheme. At the meeting of the Inter-State Transport Commissioners held at Cochin in April 1972, the matter regarding the issue of composite permit for public carrier to ply in the South Zone (i.e. Kerala, Tamil Nadu, Karnataka, Pondicherry, Andhra Pradesh, Maharashtra and Gujarat) was discussed, and Pondicherry came to be admitted into the South Zone Permit Scheme and was allotted 50 permits. A number of buses are plying between Pondicherry and various towns of the neighbouring state of Tamil Nadu, some buses plying in a direct way and some others plying in an indirect way so as to touch a number of enclaves of this Territory en route. The details of permits issued for buses plying in different routes either from or through this Territory are given below :

Sl. No.	Route	No. of buses
Pondicherry region		
1.	Pondicherry to Cuddalore	9
2.	Pondicherry to Tindivanam	3
3.	Pondicherry to Villupuram	9
4.	Pondicherry to Panruti	4
5.	Pondicherry to Tiruvennainallur	2
6.	Pondicherry to Kadampuliyur	1
7.	Pondicherry to Madras	2
8.	Pondicherry to Kappur	1
9.	Pondicherry to Neyveli	1

Sl. No.	Route	No. of buses
10.	Pondicherry to Vridhachalam	1
11.	Kanakachettikulam to Cuddalore.. ..	1
12.	Sedarappattu to Cuddalore	1
13.	Tirukkanur to Cuddalore	2
14.	Muttiyalupettai to Cuddalore	1
15.	Villiyannur to Sanjeevirayanpet	1
16.	T. N. Palayam to Villupuram	1
17.	Ariyankuppam to Villupuram	1
18.	Villupuram to Pondicherry	1
19.	Kattumannargudi to Pondicherry	1
20.	Marakkanam to Tirukkanur	1
21.	Cuddalore to Tindivanam	3
22.	Villupuram to Cuddalore	3
23.	Cuddalore to Villupuram	1
24.	Chidambaram to Tindivanam	2
25.	Cuddalore to Avanipur	1
Karaikal region		
1.	Karaikal to Nagore	1
2.	Karaikal to Poraiyar	1
3.	Ambagarattur to Nannilam	1
4.	Nannilam to Vanjiyur	1
5.	Tarangambadi to Nedungadu	1
6.	Mayuram to Vanjiyur	1
7.	Nagappattinam to Pondicherry	1
8.	Nagappattinam to Mayuram	1
9.	Nagappattinam to Kumbakonam	1
10.	Kumbakonam to Tiruvarur	1
Mahe region		
1.	Pandakkal to Badagara	1
2.	East Pallur to Mahe	1
Yanam region		
1.	Kuyyeru to Kakinada	1

A certain number of buses plying between towns in Tamil Nadu halt in the Territory en route to pick up passengers.

Buses for which permits are issued by the Government of Tamil Nadu also run through this Territory. The details of the number of buses allocated to the Government of Tamil Nadu are furnished below :

Sl. No.	Route	Permits
1.	Pondicherry to Bangalore	3
2.	Pondicherry to Chetpet	1
3.	Pondicherry to Karaikal	1
4.	Pondicherry to Kundiamallur	1
5.	Pondicherry to Nagappattinam	1
6.	Pondicherry to Rettanai	1
7.	Pondicherry to Sirkali	1
8.	Madras to Nagappattinam	10
9.	Madras to Nagercoil	4
10.	Madras to Thiruchchirapalli	4
11.	Karaikal to Mannarkudi	1
12.	Andakudi to Karaikal	1
13.	Kumbakonam to Karaikal	1
14.	Avanipur to Pondicherry	1
15.	Chidambaram to Pondicherry	2
16.	Cuddalore to Pondicherry	6
17.	Kedar to Pondicherry	1
18.	Madras to Pondicherry	11
19.	Pankolathur to Pondicherry	1
20.	Perunagar to Pondicherry	1
21.	Tindivanam to Pondicherry	5

Sl. No.	Route	Permits
22.	Tiruvannamalai to Pondicherry	4
23.	Tiruchchirapalli to Pondicherry	1
24.	Villupuram to Pondicherry	2
25.	Vriddachalam to Pondicherry	1
26.	Cuddalore to Cuddalore	1
27.	Cuddalore to Kanchipuram	1
28.	Cuddalore to Marakkanam	1
29.	Cuddalore to Tindivanam	4
30.	Cuddalore to Thiruvannamalai	2
31.	Cuddalore to Velur	1
32.	Nagappattinam to Chidambaram	2
33.	Nagappattinam to Kumbakonam	1
34.	Nagappattinam to Mayuram	4
35.	Nagappattinam to Poompuhar	2
36.	Nagappattinam to Sankaranpandal	2
37.	Kumbakonam to Poraiyar	3
38.	Poraiyar to Nagappattinam	2
39.	Mayuram to Nagappattinam	1
40.	Chidambaram to Tindivanam	2
41.	Tindivanam to Chidambaram	1
42.	Tindivanam to Cuddalore	4
43.	Tindivanam to Tindivanam	1
44.	Panruti to Cheyyur	1
45.	Chetpet to Panrutti	1
46.	Marakkanam to Tirukkoyilur	4
47.	Nannilam to Kumbakonam	2

The number of vehicles such as cars, buses, etc., increased in the Territory with the development of roads and the improvement in the income of some sections of the population. The need for a cheap and quick mode

of transport for the middle class consisting of traders, government servants, etc. increased the demand for scooters and motor-cycles. With the increase in the production of scooters and motor-cycles in the country, the number of these vehicles showed a steady increase. In the context of the growing popularity of tourism, contract carriages such as tourist taxis, luxury coaches and auto-rickshaws were also introduced so as to meet the varied requirements of the population. The increase in the number of vehicles in circulation in the Territory will be evident from the following statement :

Sl. No.	Type of vehicles			As on 31 December						
				1954	1959	1964	1969	1971	1973	1974
1. Car	50	426	666	944	1,110	1,482	1,677
2. Lorry	4	76	163	219	205	174	219
3. Bus including spare buses and contract carriages				—	60	118	113	219	225	226
4. Ambulance	1	1	7	11	9	10	10
5. Jeep	—	25	52	88	82	81	126
6. Tractor	1	7	61	91	145	263	245
7. Van	—	9	22	31	37	26	32
8. Scooter/Motor-cycle	7	65	411	1,121	1,710	2,383	3,082
9. Auto-rickshaw 6 seater 2 seater	}			—	—	—	13	2	2	18
10. Road roller	—	3	8	1	6	5	5
11. Trailer	—	10	97	95	148	165	218
12. Mobile tank	—	2	2	3	1	1	8
13. Trailer pump	—	1	1	1	—	—	2
14. 3-Wheeler auto van	—	—	25	4	15	13	18
15. Others	—	—	—	115	67	56	71

The public transport system in the Territory is entirely handled by private operators. The number of companies or individuals and the number of vehicles owned by them as on 31 March 1974 are given below :

Category of permits	No. of operators	No. of vehicles
Stage carriages	42	98
Contract carriages	78	86*
Public carriers	175	192
Private carriers	96	107

* Four wheelers 17; three wheelers 5; public taxis 41; tourist taxis 11 and auto-rickshaws 12.

While there was not even a single contract carriage till 1954, the number had increased to 21 by 31 December 1974. The number of public and tourist taxis stood at 149 as on 31 December 1974.

Town bus service :

Proposals were under consideration as early as 1961 to introduce town bus services in the Territory. The fast growth of the town and the springing up of residential colonies away from the town necessitated the introduction of town buses in Pondicherry. The introduction of town buses, it was considered, would discourage the use of hand pulled rickshaws which was then the most popular mode of local transport. To begin with, it was decided to introduce 13 town bus routes, seven in Pondicherry and three each in Karaikal and Mahe. As for Mahe, the Government of Kerala was approached to permit the vehicles registered in Mahe to run through Kerala territory for a few miles.

Details of town bus routes as on 31 March 1974 in Pondicherry and Karaikal regions are given below :

Sl. No.	Routes	No. of buses
Pondicherry region		
1.	Pondicherry to Pondicherry (circular)	2
2.	Pondicherry to Villianur	2
3.	Dhanwantarinagar to Dhanwantarinagar (circular)	2
4.	Purnankuppam to Dhanwantarinagar	1
5.	Ariyur to Dhanwantarinagar	2
6.	Muttialupettai to Villianur	2
Karaikal region		
1.	Karaikal to Karaikal	2
2.	Ambagarattur to Vanjiyur	1
3.	Nallattur to Vanjiyur	1
4.	Ambagarattur to Vilidiyur	1

III. Railways

The Union Territory of Pondicherry is served by two metre gauge lines of Southern Railway, one connecting Pondicherry with Villupuram and the other connecting Karaikal with Peralam in Tamil Nadu.*

* The total length of these two lines traversing the Union Territory is 27.11 km. according to the Southern Railway. French records however show the length of Karaikal—Peralam line as 15.577 km. and that of Pondicherry—Villupuram line as 12.633 km. within the limits of the Territory, making the total 28.210 km. This shows a difference of 1,100m. But it must be noted that the railway line along the beach and over the old pier was dismantled after merger.

Pondicherry—Villupuram line :

The origin of the Pondicherry—Villupuram railway line may be traced back to 1869, when its construction was entrusted to the Pondicherry Railway Company, a limited concern constituted in 1869 by virtue of the British Parliament Acts of 1862 and 1867 on the formation of companies. The French Government in Paris reached an agreement with the Pondicherry Railway Company on 8 May 1878. Under this agreement the Pondicherry administration had to pay to the Company a subsidy of 1,264,375 francs to meet the construction cost of the line and place the lands required for the purpose free of cost. The period of concession was for 99 years. The proposed railway line which was to start from Pondicherry had to be laid upto the eastern bank of river Gingee and join the British railway line at Belpur. The Company, for its part, agreed to remit to the French Government during the period of concession half of the net profit arrived at after deducting the expenditure on maintenance, taxes, etc. The French Administration enjoyed the right to transport its mail and was entitled to all such benefits enjoyed by the British Government. According to the same agreement, the railway would become the property of the States on the expiry of the period of concession (viz. June 18, 1978). The first passenger train steamed in at Pondicherry on 14 October 1879. The official inauguration ceremony was however performed by the British Governor, the Duke of Buckingham, on 15 December 1879. The line which passed through the communes of Mudaliyarpettai, Ozhukarai, Villiyanur and Tirubhuvanai (now Mannadipattu) covered a distance of 37.62 km. out of which 12.633 km. ran within this Territory.⁴⁹ Four trains ran between Pondicherry and Villupuram. Two trains left Pondicherry for Villupuram at 06.10 hrs. and 13.00 hrs. Similarly two trains left Villupuram for Pondicherry at 08.50 hrs. and at 15.35 hrs.⁵⁰ The trains touched Villiyanur, Kandamangalam and Valavanur before reaching Villupuram. Facilities were available for straight journey to Madras and Karaikal by through compartments.

The goods service was also introduced simultaneously along with passenger traffic. A wide variety of goods was exported from Pondicherry and brought into the town by rail. Coal, mazout, petrol, bones, cement, rice, pulses and ground-nut were among the chief items imported. Cotton, yarn, hides and skin, areca and scrap-iron formed the chief items of export. The movement of goods

and traffic which was hampered by the Second World War, revived with the removal of customs barriers with effect from 15 February 1941. The details of passenger and goods traffic between 1936 and 1942 are furnished below: 51

Year ending on 31 March	Receipts			Total
	Passengers	Goods	Miscellaneous	
	Rs.	Rs.	Rs.	Rs.
1936	55,160	67,029	1,058	1,23,247
1937	59,285	98,387	1,965	1,59,637
1938	53,623	70,923	1,620	1,26,166
1939	44,269	52,876	1,607	98,752
1940	38,678	44,739	1,454	84,871
1941	36,701	20,249	1,142	58,092
1942	39,852	40,184	1,265	81,301

In 1935 the number of trains plying between Pondicherry and Villupuram was increased to six in each direction. In November 1941, however, the number of trains was reduced to four, and subsequently to three in March 1942, then to two in April 1942 and finally to one in September 1942. Simultaneously, the goods train plying once a day in each direction began to run once in two days in each direction from February 1942 upto September 1942. 52

Karaikal—Peralam line:

The construction of a branch railway line branching off from the main Mayuram—Mottupet line and connecting Peralam with Karaikal was authorised by the French Government in December 1895. 53 This railway line owned by the French Government was operated by the South Indian Railway in accordance with the terms of an agreement reached in 1902. The agreement was subject to termination at a year's notice. The Company had

to remit to the French Government the net profit arrived at after deducting the maintenance cost. Built at a cost of 1,201,840 francs the line was opened to traffic on 14 March 1898. It covered a distance of 23.537 km. out of which eight kilometres fell within the limits of Tamil Nadu. The distance was covered in one hour. There are four intermediate stations at Ambagarattur, Paruttikudi, Tirunallar and Karaikovilpattu within the region.

Prior to 1939, four trains were operated in each direction. But in 1941 the number was reduced by one in each direction.⁵⁴ The number of trains in each direction was further reduced to two and then to one in 1942 in order to mitigate the loss reflecting a progressive decline in the goods handled and the number of passengers carried during this period.⁵⁵ The table below which gives the receipts for the years 1938-43 will illustrate this point :

Year	Receipts			Total
	Passengers	Goods	Miscellaneous	
	Rs.	Rs.	Rs.	Rs.
1938	39,561	25,942	32	65,535
1939	37,340	26,243	409	63,992
1940	36,389	23,628	326	60,343
1941	37,666	24,507	290	62,463
1942	23,556	24,310	424	48,290
1943	24,537	20,760	1,438	46,735

After merger :

After merger, the ownership and administration of the line came to vest with the Government of India and its operation came to rest with the Southern Railway which was formed on 14 April 1951 by the integration of the erstwhile Madras and Southern Mahratta Railway, the South Indian Railway and the Mysore State Railway.

Pondicherry and Villianur are the two stations lying within the Territory in the Villupuram—Pondicherry section. Villianur is a 'D' class flag station. Pondicherry is provided with standard 'I Lower Quadrant Signalling'. Neals' Ball token instrument is in use. The Pondicherry—Villupuram section being a controlled area, Pondicherry is provided with a control telephone to be in contact with the Divisional Headquarters at Tiruchchirapalli. It is connected with Villupuram by a Railway Telegraph Circuit.

Four up and four down passenger trains run on Pondicherry—Villupuram line at convenient intervals and they are so timed as to connect important trains on the main line running via Villupuram. Through carriage service with one composite I and II class bogie and one II class bogie connecting Pondicherry with Madras is made available for passengers bound for Madras. Express day service connecting Pondicherry with Madras introduced on 1 November 1972 was later withdrawn for want of patronage. Reservation facilities are also available at Pondicherry to all sections in India.

The Pondicherry railway station with a singularly different architectural facade is provided with a spacious waiting hall and two first class waiting rooms, one for men and another for ladies. Recently four retiring rooms (two double-bed and two single-bed) were provided as a further amenity for long distance passengers.

The Peralam—Karaikal line too is operated by the Southern Railway under the immediate supervision of the Divisional Superintendent at Tiruchchirapalli and under the overall control of the General Manager at Madras. A magneto telephone circuit connects Karaikal with Peralam junction. 'One Engine only System' is used for working trains in this section. Two trains in each direction run between Mayuram and Karaikal and one in each direction between Peralam and Karaikal.

All the stations in the Peralam—Karaikal line are open for parcel service. Tirunallar is open for goods traffic in smalls and Karaikal for goods traffic in wagon loads and in smalls. While cement, tiles, timber and kerosene oil are among the items of inward traffic, rice and paddy are the main items of outward traffic. Nowadays paddy and rice are moved through lorries by the Food Corporation of India. From 1 November 1970 a mixed train service was re-introduced on the Peralam—Karaikal line to effect quick delivery of goods.

Prospects :

The raw materials viz., full pressed cotton and coal for the three textile mills in the region and iron billets for the Pondicherry Rolling Mill are brought in by rail. Similarly the finished products of these mills are sent to other parts of the country. Cement, grains, pulses are among the other items moved into the town. The goods traffic by rail is also inter-connected with the activities of the port which feeds the goods movement by rail. Fertilisers and wheat handled by the Pondicherry port are sent out to various parts of the country.

According to the railway authorities, the facilities made available to the public in the Pondicherry—Villupuram line and Peralam—Karaikal line are under-utilised resulting in loss. This may also be attributed to the fast growth of road transport in the Territory and the inability of the railways to compete with road transport in terms of speed and other amenities.

According to a British Foreign Office Publication put out in 1918 proposals seem to have been put forward quite frequently to develop the railway system in French India. A favourite project was to build a railway line along the coast from Pondicherry to Cuddalore (via) Bahur. The matter was under consideration for almost a quarter of a century. The idea was abandoned in 1897 only to be revived in 1904. The next year it was sanctioned by the Senate and the funds were voted. In fact an amount of three million francs, out of a loan of 4,380,000 francs raised by the administration was earmarked for the project.⁵⁶ The amount, it appears, was subsequently diverted for some irrigation projects.⁵⁷

The National Council for Applied Economic Research which conducted a transport survey of Pondicherry in 1967 pointed out that the railway facilities in Pondicherry and Karaikal were adequate for meeting the needs then. In fact the utilisation of rail was very low. The charted capacity then available was 16 trains per day on the Villupuram—Pondicherry section while the expected utilisation at the end of the III Plan period (1966) was only five trains each day. On the Peralam—Karaikal line the charted capacity was eight trains per day as against the expected utilisation of two trains per day. The goods traffic density over the two branch lines was only about 203 and 63 freight tonnes kilometres per route km. per day respectively and

the passenger traffic density 1,331 and 427 passenger kms. per route km. These traffic density figures were as against the corresponding averages of 2214 and 2180 for the entire railway section lying within the region. Thus the two stations were of very light traffic density. The National Council for Applied Economic Research therefore felt that in respect of both passenger and goods traffic by rail no further investment was called for except in rolling stock. 58

IV. Ferries and Bridges

Ferries :

The Yadurlanka Ferry Service : This is the most important ferry service operating in the Territory. According to an agreement reached between the former French administration and the Government of the then Madras Presidency in 1920, the Yanam Municipality was entitled to 50 per cent of the annual proceeds of the Yadurlanka Ferry Service. The income for the Yanam Municipality from the source amounted to several thousand rupees per annum.

The Coringa Ferry Service : A ferry service is in operation across Coringa River. The Yanam Municipality gets an income of about Rs. 2,000 from this service.

The Ariyankuppam Ferry Service : The Commune Panchayat of Ariyankuppam receives a small income from the ferry service (seasonal) operated across Ariyankuppam river.

Bridges :

Almost all rivers and streams running across roads in the Territory are spanned with bridges and culverts. There are in all 18 big and small bridges in Pondicherry region alone.*

Chunnambu Ar bridge : A bridge seems to have been built on the Pondicherry—Cuddalore Road across Chunnambu Ar in the year 1857 at a cost of Rs. 39,000 shared equally between the French and the British Governments

* According to a list furnished by the Public Works Department.

This bridge was washed away by flood waters in 1884 and was rebuilt between 1888–1890, the cost again being shared equally between the French and the British Governments. This brick masonry bridge is the largest in the Territory and spans a distance of 468 metres.

Two other bridges across Chunnambu Ar near Tavalakuppam were damaged during the floods in 1966. Both were rebuilt in 1972. These are R.C.C. bridges, one spanning a length of 36 metres and the other of 32 metres.

The Gingee river bridge : The submersible causeway across the river Gingee on the Villupuram road (R.C. 29) seems to have been rebuilt in the year 1938. But during heavy rains traffic was hampered and it was not safe to cross the river. Especially during floods, this vital communication link remained cut off. To overcome this difficulty, a 356 metre long R.C.C. bridge was built at an estimated cost of Rs. 17.5 lakhs and declared open to traffic in 1973. This is the second largest bridge in the region.

The Muttarambattu bridge along the Pappanampet—Valudavur road across Gingee river was constructed at a total cost of Rs. 12.00 lakhs shared equally by the Pondicherry administration and the Government of Tamil Nadu.

Ariyankuppam river bridge : The bridge over the Ariyankuppam river along the Pondicherry—Cuddalore road was first constructed during the French period and opened to traffic on 28 August 1864. This bridge was damaged during the floods in 1884 and was again reconstructed in 1888. This is the third largest bridge in the region and spans a length of 186 metres.

Kumaramangalam bridge : The original bridge over Malattar in Kumaramangalam was damaged by the floods in 1937.⁵⁹ A new 'Cantilever' type of bridge was built across the feeder canal of Abhishekapakkam in 1939.

The two bridges along the Villianur road (R.C. 3) and Villupuram road (R.C. 4) beyond the West Boulevard, provide access to Pondicherry town from the west. These bridges were also built during the French period. The brick masonry bridge near Saram is built on the Valudavur road. The bridge on the Mahatma Gandhi road links Muttiyalupettai with Pondicherry town.

The two bridges on the Vayittikuppam road provide access to Kurichchikuppam and Vayittikuppam from the town. The brick masonry bridge on Laspettai road near Karuvadikkuppam was also built during the French period.

Karaikal : All the bridges, except the Nandalar bridge at Nallattur in Karaikal region, were built during the French period. The Nandalar bridge at Nallathur was constructed only in 1968. From the records available it is seen that no damage had occurred to any bridge after 1900. There are again no inter-state bridges, although Nandalar bridge along Poraiyar road, which spans a length of 61 metres and the third longest in the region, is said to belong to Pondicherry and Tamil Nadu presumably on the ground that the cost might have been shared by both the Governments. While the Arasalar, Tirumalarajanar, Puravadaianar, Nattar, Uppanar and Nular claim a bridge each, the Nandalar is spanned by two bridges, the Muliya and Vanjiar by three each.

Mahe : The construction work of a bridge over the Mahe river was undertaken in 1971-72 by the neighbouring State of Kerala. The cost was met proportionately by both Governments. The bridge is of 8.90 metres width, R.C.C. type and 116.15 m. in length with eight spans. The Gopalam bridge (6.15 m width) and the Moolakadavu bridge (5.80), both in Pandakkal, are the two other bridges worth mentioning. Both are built along the Tellicherry—Champad road.

Yanam : The bridge across river Coringa in Yanam was constructed in 1932. It is of R.C.C. type, consisting of eight spans and 73.50 metres in length. The centre of the bridge marks the territorial limit of Andhra Pradesh and the Union Territory of Pondicherry.

The brick masonry bridge on Tota street is the only other bridge of some importance in the region. Both these bridges are on the Yanam—Kakinada highway.

V. Transport by air

Light weight planes have often effected landings in Pondicherry since the year 1930.⁶⁰ Many a time had the arid tract of Laspettai, [only seven km. away from the town served as a landing site for planes. Level ground fields could receive planes of average tonnage during summer. According to another report there was a small levelled up ground near the mouth of Ariyankuppam river which could receive flights during eight months in a year.⁶¹ Once a year planes from Madras and rarely a French tourist plane landed here.⁶² On 28 January 1939 an enthusiastic crowd of people witnessed the landing of a

plane piloted by Weiss Girier at Suttukanni. In fact, the same year a commission was appointed to select a suitable site in the vicinity of Pondicherry for the landing of planes.⁶³ As only dry table lands were considered suitable for an airfield, the selection posed some difficulty as lands around Pondicherry were mostly low lying and under paddy cultivation. As a result of the survey eight sites were identified as suitable for consideration. The commission however came to the conclusion that the land in Sedarappattu alongside the Pondicherry-Tindivanam road would be better than the one at Laspettai. A site each at Muttirapalaiyam and Gudappakkam were also considered suitable. But the cost of civil works alone was expected to involve an expenditure between Rs. 30,000 and Rs. 60,000. With a view to minimising expenditure it was decided not to acquire the lands straightaway but to take them on lease allowing at the same time the cultivators to grow groundnuts etc., which would not hamper the landing of planes.⁶⁴

In the meanwhile the British Government had constituted a committee in 1944 to consider proposals for the improvement/expansion of air fields in India. The committee arrived at the conclusion that it would be necessary to build one hundred and eleven aerodromes within a period of ten years, probably as a war time measure. While the aerodromes in Karachi, Calcutta, Delhi and Bombay were proposed to be developed for transcontinental flights, the others were intended only for internal flights. Its recommendations were criticised on the ground that the requirements of Southern India, which would be the halting point for planes flying to Australia had not been given due importance. About the same time, the then Pondicherry administration also pressed for the development of Pondicherry as a halting point for planes flying between Calcutta-Colombo.⁶⁵

After merger, the administration once again started pressing the Department of Civil Aviation from time to time to provide this Territory with the facility of an aerodrome. This was done not only with a view to placing the Territory on the aviation map of India but also to encouraging the flow of tourist traffic in the context of the world wide popularity of Sri Aurobindo Ashram and Auroville. The officers of the Civil Aviation Department visited Pondicherry in January 1971 and inspected two sites, one branching off at 15 km. and the other branching off at 10 km. from Pondicherry on the western side of the old Madras Road (i.e., the Pondicherry-Marakkanam road). The site at 10 km.

was considered better making it feasible to develop initially a 6,000 feet runway with scope for extending it later upto 10,000 feet. The fact that only dry crops were being cultivated in the area also weighed in its favour.

At present, Madras on the north, Bangalore on the west and Tiruchchirappalli on the south are the nearest airports which serve the needs of Pondicherry and Karaikal. Kozhikode airport is the nearest from Mahe and Vijayawada from Yanam.

VI. Travel and tourist facilities

Modelled after the medieval towns of France with promenades, boulevards and vistas, Pondicherry has a distinct character which distinguishes it from other towns in India. Its little mansions, high ceiling dwellings adorned with carved masonry pillars, terraced balconys, tall framed doors and windows, chandeliers, candelabra and consoles are all testimonies of a three hundred-year-long association with France. These features, combined with the numerous temples, churches and mosques in their varied hues and styles have endowed it with an aura of serenity that is both sublime and rare.

Sri Aurobindo sought the shores of Pondicherry in 1910. After some sixteen years of rigorous *tapasya*, the Ashram was organised on a practical basis and has grown since then steadily under the Mother's guidance.⁶⁶ Pondicherry is today a pilgrimage centre with the Samadhis of Aurobindo and the Mother attracting devotees from all over the world. Apart from its own importance as a tourist destination, Pondicherry is at the centre of a region noted for its historic monuments. It is very close to such renowned places as Chidambaram, Gingee, Tiruvakkarai and Vedanthangal. The temples at Bahur Tirubhuvanai, Madagadippattu and Tiruvandarkovil—some of the oldest in South India—are all situated around Pondicherry. Endowed with such unique features, it was but natural for the town to grow into a centre of tourist attraction. It was only in December 1961, that a Tourist Wing came to be formed in the General Administration (Information) Department to deal with all problems connected with tourism in the Territory.⁶⁷ Early attempts were confined mainly to the provision of decent hotel accommodation at reasonable rates. A nine-bed tourist home was first opened at Karaikal in January 1964. The 20-bed tourist home in Pondicherry was declared open on 10 August 1967. This was followed by the opening of a six-bed tourist home at Mahe in October 1969.

With the opening of the Tourist Information Bureau in 1961 efforts were made to popularise the tourist attractions of Pondicherry and to furnish travel and tourist information to incoming as well as outgoing tourists. In March 1966, the Sri Dharbaranyeswarer Devasthanam of Tirunallar built from its own funds a tourist lodge, to serve the needs of pilgrims visiting the temple.⁶⁸

Realising the growing importance of tourism and the need to devote special attention to the implementation of plan schemes the 'Tourism Wing' which was until then under the administrative control of the Public Relations Officer was bifurcated with effect from 1 July 1970 and conferred an independent status. The Tourism Wing was thus placed under the control of the Tourist Officer, subsequently redesignated as Director of Tourism.⁶⁹ This arrangement was dispensed with on 8 June 1973 and the Directorate was once again merged with the Directorate of Information and Publicity.

In due course the Municipalities also started evincing some interest in the tourist trade. On 22 May 1968 the Karaikal Municipality opened an 18-bed tourist home in Karaikal town. The Pondicherry Municipality soon followed (29 July 1971) with a 14-bed tourist home in Pondicherry. Sri Aurobindo Ashram and Sri Aurobindo Society run a number of guest houses mainly to cater to those visiting the Ashram.

In 1969 two air-conditioned suites were added to the Government Tourist Home at Uppalam by way of further expansion.⁷⁰ To cope up with the increased demand for decent hotel accommodation in the town, the administration sanctioned a sum of Rs. 3.19 lakhs for the construction of a 28-bed annexe to the Tourist Home at Uppalam. Another 34-bed home was declared open on 11 November 1973 at Indira Nagar (close to Dhanwantari Nagar) to cater to the needs of people visiting Dhanwantari Nagar.⁷¹ The three-bed Government Guest House in Yanam was declared open on 12 April 1974. Thus by the end of the IV Plan the total bed strength of Government Tourist Homes exceeded hundred as against none at the beginning of the II Plan. A Tourist Information Bureau started functioning at Karaikal from 17 August 1975.

Private entrepreneurs have not lagged behind in providing hotels attached with air-conditioned bars, roof gardens for moon-light dinners etc. The Grand Hotel d'Europe established in 1891 is so well known for its French cuisine.

Several other hotels which serve good western dishes have come up recently. There are a couple of eating places serving French and Vietnamese dishes in the town.

In order to provide accommodation and other facilities to excursion parties, it was proposed to establish two Excursion Centres, one at Pondicherry and the other at Tirunallar in Karaikal under the IV Plan. The Excursion Centre at Pondicherry, providing dormitory type accommodation for 100 persons was declared open on 24 February 1976. In order to provide some recreational avenues for visiting tourists, it was decided to introduce rowing boats in Chunnambu Ar (river) and Usteri (lake). Boats were brought from Kodaikanal. Boating in Usteri was introduced on 19 December 1970. Water being available in Usteri only for six months a year i.e. from October to February, boating facilities are available only during this period. During the remaining period, the boats operate in Chunnambu Ar. The lake site, being an ideal picnic spot, was proposed to be beautified with way-side parks alongside the lake and sheds for picnic parties with recreational facilities. Facilities for sun and sea bath near the new pier in Pondicherry was provided with effect from 23 February 1976.

The Inspection Bungalows at Suttukanni, Bahur, Gudappakkam, Karaiyamputtur and Sornavur, all situated amidst salubrious surroundings close to the bank of a lake or river were under the management of the Public Works Department.⁷² Officials as well as the public used to frequent these spots during week-ends especially during summer. While some of these Inspection Bungalows were in a state of neglect for want of proper renovation and maintenance, some others were put to other use.

With the steadily growing importance of Pondicherry as a tourist centre interest among entrepreneurs grew in travel trade. A few travel agencies started operation, but due to lack of steady business had to close down. Recently some outside travel agencies have opened their branches in Pondicherry. There are no recognised travel agencies in the Territory. C.J. Revals, Auro Travels and Amsham Travels undertake domestic as well as international air bookings.

A number of private individuals and firms arrange casual tours to place of tourist interest and also to pilgrim centres, especially during festival seasons. The functioning of these firms are not subjected to any regulation. Since 1972 sight seeing tours are arranged by the Tourist Information Bureau,

VII. Post, telegraphs and telephones

Since the arrival of the French in Pondicherry, some arrangement or other existed for the receipt and despatch of official correspondence. These messages used to be sent through Brahmin messengers as the sacred texts forbade any kind of harm being done to them both in times of war and peace. Hence Muslim rulers as well as the European companies found it safe to employ them for this onerous job. Added to this, the brahmins were found well-versed in different languages. Anandarangapillai tells us that Chanda Saheb alone retained as many as one hundred brahmins for the purpose. There was another class of messengers known as *chobdars*. We hear of one *chobdar* Bade Khan who was sent with letters to Madras. Anandarangapillai tells us about delivering a letter to his *chobdar*. The *harkaras* formed another set of messengers. The Muslim rulers in those days used the camel for carrying specially urgent letters. There are instances of camel messengers arriving at Pondicherry from Muslim rulers and letters being despatched from Pondicherry through camel messengers.⁷³

In those days letters from Pondicherry reached Karaikal and Tiruchchirapalli in two days. Letters from Madras reached Pondicherry the next day, from Mahe and Mysore within 10 days. Letters from France reached Pondicherry in about four months provided vessels did not halt at any port on their way to Pondicherry. In fact letters from France used to be delivered by ships at Surat from where they were brought to Pondicherry through land. It took about 21 days for messengers to reach Pondicherry from Machilipatnam.⁷⁴ When Bussy was in the kingdom of Hyderabad letters from him used to arrive at Pondicherry almost once every two or three days.⁷⁵ The use of paper being very rare then, letters were often in *cadjan* i.e. palm leaves. Letters were ordinarily sealed with the official stamp before despatch. Letters meant for high dignitaries were duly sealed and put inside lace bags before being delivered to the messengers.

The despatch of money appears to have been one of the jobs performed by those who were called 'Armbatais'*. Anandarangapillai again attests as to how he once despatched a sum of 3,000 pagodas through an 'armbatai'. He put the money at the rate of 500 pagodas in a bag, tied a bag each around the waist of a 'golla' and despatched them with 'pions' to escort.⁷⁶

* This is said to be the colloquial form of a Portuguese word which stands for army procurement agents.

It was no longer the same in the XIX century. On 11 August 1828 an agent was appointed by the Administrator to receive the letters and packets from vessels anchoring at Pondicherry. The port being his duty point, he was placed under the control of the Port Captain. A box bearing the inscription "boîte aux lettres" was placed in the port office. All those who wanted to send letters and parcels abroad had to drop them in that box.⁷⁷ About the same time, a regular postal system for the exchange of official correspondence between the various establishments also appears to have been in operation. The British Indian postal authorities conveyed the bags between the different establishments. The internal postal service was operated with the help of five post offices located at Pondicherry, Karaikal, Mahe, Yanam and Chandernagore. Everything other than letters in the shape of small packets were carried by a special courier known as 'bangué'.⁷⁸

The Treaty of Berne of 9 October 1874 brought together twenty-four countries under what was known as "Union Générale des Postes" to improve postal communication between the member-countries. In accordance with an agreement reached on 27 January 1876, the French Colonies and British India were admitted into that 'Union' with effect from 1 July 1876. Following this agreement the decree of 5 May 1876 reorganised the system of exchange of letters between the French colonies.⁷⁹

There was a monthly and a fortnightly postal service between France and India. Letters delivered by ships at Bombay were transmitted to the various French Indian establishments by the British. In 1881 was introduced a parcel service among the French colonies of Senegal, Guadeloupe, Martinique, Guyanne Française, Reunion, Pondicherry, Karaikal, Cochinchine and also among these colonies and France (including Corsica and Algeria), Tunisia, Germany, Belgium, Luxembourg and Switzerland.⁸⁰ In 1889, the facility for sending jewels or precious stones by post between France and other French colonies was introduced. These articles could be sent only in boxes indicating the value of articles.⁸¹

To sum up, the French postal system and the British postal system functioned side by side. The French post office had only limited functions to perform. They entertained registered and unregistered foreign mail and money orders. Savings bank accounts were not maintained. Payment for money orders was effected in the Treasury Office. The French post offices located in all the regions were under the control of the French Treasury Officer. The other post offices were under the control of the Post Master General, Madras. The Indian post offices functioning here rendered all kinds of services including the delivery of money orders, maintenance of savings bank accounts, etc.

Post and Telegraphs

Pondicherry region: Soon after merger, all the post offices in Pondicherry region were brought under the administrative control of the Senior Superintendent of Post Offices, South Arcot Division, Cuddalore. As on 31 March 1955 there were in Pondicherry six rural and three urban post offices. More post offices were opened in accordance with the policy of the Government of India to provide postal facilities for every village with a population of 200 and more. The Territory was slowly covered by a net work of post and telegraph offices.

In July 1961, the Zonal delivery system was introduced in Pondicherry town with five delivery post offices viz., Pondicherry Head Post Office (Pondicherry-1) Sri Aurobindo Ashram Sub-Office (Pondicherry-2), Muttiyalupettai Sub-Office (Pondicherry-3), Mudaliyarpettai Sub-Office (Pondicherry-4) and Nellittoppu Sub-Office (Pondicherry-5).⁸² With a view to ensuring quicker delivery and despatch of postal articles, the postal department decided in 1962 to link Pondicherry with Madras and Cuddalore by direct road services on contract for transport of postal bags.⁸³ With effect from January 1968, a separate Postal Division with Pondicherry as the Divisional Headquarters was established and placed under the care of a Superintendent with three subdivisions under the charge of Inspectors of Post Offices at Pondicherry, Villupuram and Tindivanam. The Pondicherry Division covered, besides Pondicherry region, the taluks of Tindivanam, Villupuram, Gingee, Valavanur and part of Cuddalore of South Arcot District.⁸⁴ With effect from 28 February 1971, the Pondicherry Head Post Office also functioned as a Night Post Office.⁸⁵

By 31 March 1974 the region was covered by a net work of one head post office, 17 departmental sub-offices, 37 extra departmental branch offices, 13 public call offices, 12 combined offices and 219 post boxes. The details of post offices are given below :

Sl. No.	Name of office	Type of office	Whether telegraph and telephone facilities exist
(1)	(2)	(3)	(4)
1.	Pondicherry	Head office	Telegraph and telephone
2.	Sri Aurobindo Ashram	Sub-office	„
3.	Dhanvantarinagar	„	„
4.	Mudaliyarpettai	„	„
5.	Muttialupettai	„	„

(1)	(2)	(3)	(4)
6. Nellitoppu	..	Sub-office	Telephone
7. Ariyankuppam	..	„	—
8. Laspettai	..	„	—
9. Odiansalai	..	„	Telephone
10. Mission Street	..	„	—
11. Pondicherry Bazaar	..	„	Telegraph and telephone
12. Pondicherry North	..	„	„
13. Pondicherry Courts	..	„	Telephone
14. Pondicherry Railway Station	..	„	Telephone
15. Bahur	..	„	Telegraph and telephone
16. Villiyanur	..	„	Telegraph
17. Tirukkanur	..	„	Telegraph
18. Nettappakkam	..	„	Telegraph
19. Abhishekapakkam	..	Branch office	—
20. Virampattinam	..	„	—
21. Sedarappattu	..	„	—
22. Kuruvinnattam	..	„	—
23. Kirumambakkam	..	„	—
24. Manappattu	..	„	—
25. Seliyamedu	..	„	—
26. Tattanchavadi	..	„	—
27. Vimakavundanpalayam	..	„	—
28. Tiruvandarkovil	..	„	—

(1)	(2)	(3)	(4)
29. Kalapet	..	Branch office	—
30. Pakkamudiyampet	—
31. Pedduchettipettai	—
32. Madukkarai	—
33. Murungappakkam	—
34. Uppalam	—
35. Solaittandavankuppam	—
36. Mottuppalaiyam	—
37. Muttirappalaiyam	—
38. Ozhukarai	—
39. Puduppalaiyam	—
40. Reddiarpalaiyam	—
41. Kariyamanikkam	Telegraph and telephone
42. Kilur	—
43. Mandagappattu	—
44. Nallattur	—
45. Pakkam	—
46. Lingareddipalayam	—
47. Madagadippattu	—
48. Puranasingapalayam	—
49. Tirubhuvanai	—
50. Gudappakkam	—
51. Katterikuppam	—
52. Suttukanni	—
53. Tondamanattam	—
54. Arumattapuram	—
55. Mangalam	—

The Pondicherry head post office and Sri Aurobindo Ashram post office are Philatelic Centres eligible for the issue of commemorative stamps and First Day Covers.

The Pondicherry Central Telegraph Office is equipped with one teleprinter circuit and six omnibus morse circuits. The teleprinter circuit is linked to Madras. The details of six omnibus circuits and the working stations are given below :

<i>Name of the circuit</i>	<i>Connected stations</i>
1. PY - VP LL	(a) Villiyanur (Valudavur is connected on phonocom to Villiyanur) (b) Kandamangalam. (c) Pallineliyanur. (d) Valavanur (Kariyamanikkam, Nettappakkam, Koliyanur are connected on phonocom to Valavanur). (e) Villupuram.
2. 3/25	(a) Villupuram. (b) Mayuram.
3. P/1	(a) Cuddalore. (b) Chidambaram.
4. Kic LL (Killai Local)	(a) Mudaliyarpettai. (b) Bahur. (c) Parangippettai. (d) Killai.
5. Aur LL (Auroville Local)	(a) Pondicherry North. (b) Pondicherry Bazaar. (c) Dhanwantarinagar. (d) Auroville.
6. Kok LL (Kottaikuppam)	(a) Pondicherry Head Post Office. (b) Pondicherry Ashram Post Office. (c) Muttiyalupettai. (d) Laspettai. (e) Kottaikuppam.

Vanur is worked on phonocom by the Central Telegraph Office (C.T.O.) Pondicherry. There are phono combined offices (offices providing facilities for transmission of telegraph messages over phone) at Tirukkanur (connected to Vikravandi morse working combined offices), Nettappakkam and Kariyamanikkam (both connected to Valavanur morse working combined office). There are 13 local public call offices connected to Pondicherry telephone exchange out of which two are Coin Collecting Box (CCB) type. The broadcasting cable consists of a cable mileage of 14.41 km. and conductor mileage of 115.25 km. The C.T.O. Pondicherry is now provided with facilities for sending telegrams in Devanagari script.

Karaikal region:

The post offices in this region were under the jurisdiction of the Thanjavur Postal Division. From 1 December 1954, they were brought under the jurisdiction of East Thanjavur Postal Division of the Tamil Nadu Postal Circle under the charge of the Senior Superintendent of Post Offices, having his headquarters at Nagappattinam. From only two sub-post offices and 12 extra departmental post offices in 1950, the number had increased to nine sub-post offices and 17 branch post offices in 1974.

Details of all post offices in the region as on 31 March 1974 are furnished below :

Sl. No. (1)	Name of office (2)	Type of office (3)	Whether telegraph and telephone facilities exist (4)
1.	Dupleix Street	.. Sub-office	Telegraph and telephone facilities exist
2.	Mathakoil Street	.. ..	..
3.	Bus Stand	.. ..	..
4.	Talatteruvu (Nehru Nagar)	.. ..	..
5.	Tirunallar	.. ..	..
6.	Nedungadu	.. ..	..
7.	T.R. Pattinam	.. ..	..
8.	Ambagarattur	.. ..	..
9.	Niravi	.. ..	..

(1)	(2)	(3)	(4)
10. Nallambal	..	Branch office	Telegraph facilities exist
11. Settur	..	"	"
12. Madagadi	..	"	"
13. Dharmapuram	..	"	"
14. Karaikovilpattu	..	"	"
15. Kurumbagaram	..	"	"
16. Mel Kasakkudi	..	"	"
17. Akkaravattam	..	"	"
18. Karaikalmedu	..	"	"
19. Kottuchcheri	..	"	"
20. Tiruvettakudi	..	"	"
21. Varachchakudi	..	"	"
22. T.R. Pattinam	..	"	"
23. Karkkangudi	..	"	"
24. Sellur	..	"	"
25. Sorakkudi	..	"	"

There were in all 113 post boxes throughout the region. All the post offices in the region were provided with Savings Bank facilities.

The telegraph offices are located at (1) Karaikal, (2) Tirunamalarajan-pattinam, (3) Tirunallar, (4) Tittachcheri, (5) Niravi and (6) Nedungadu all of which are connected to the Mayuram Telegraph Office.

Mahe region:

The Indian Post and Telegraph Office in Mahe is known to be one of the oldest of its kind in India. It is attested, on the basis of records in the office that the Post Office Savings Bank started functioning in Mahe as far back as 1882, simultaneously with the introduction of the Savings Bank Scheme in India.

Details of post offices in Mahe region are furnished below :

Sl. No.	Name of office	Type of office	Whether telegraph/telephone facilities exist
1.	Mahe (town)	Departmental sub-post office	Telephone and telegraph facilities exist.
2.	Pallur (village)	Extra departmental branch	Telegraph facilities only.
3.	Pandakkal (village)	"	
4.	Naluthara (village)	"	Telephone and telegraph facilities exist.

As for Telegraphs, the Mahe C.O. was opened before 1891 and the P.C.O. was opened on 3 March 1955. The new Mahe C.O. was opened on 15 September 1953 and the P.C.O. was opened on 25 October 1953. Both Mahe and New Mahe C.Os are connected to Calicut.

Yanam region :

Yanam is provided with one 'A' class sub-post office placed under the control of the Kakinada Head Post Office. The branch post offices function under the Yanam Sub-Post Office :

- | | |
|---------------------|-----------------------|
| 1. Balusutippa (S) | 6. Kothapalli (Yanam) |
| 2. Guttinadeevi (S) | 7. Pallipalem (S) |
| 3. Ingeram (S) | 8. Pillanka (S) |
| 4. Kapulapalem (S) | 9. Uppangala (S) |
| 5. Kolanka (S) | 10. Yadurlanka (S) |

There is also a telegraph office in Yanam town working on the morse system connected to Kakinada.

Telephones :

Pondicherry region :

In 1887 **Banque de l'Indo-Chine** was authorised to instal a Telephone exchange in Pondicherry. In 1907 the Bank decided to transfer the management of the telephone system to the Government. Two years later, the Pondicherry **Chambre de Commerce** came forward to run it.

When, however, the exchange became defective, the Administration with a view to setting it right, entered into correspondence with the British Government and **Ministère des Colonies** which continued till 1937. In the meanwhile, the British Post and Telegraph Authorities came forward to instal an automatic exchange at Pondicherry connecting it with British India. The work which started in June 1941 was completed in August.⁸⁶ Contact was established with British India in August 1942 via Cuddalore exclusively for military purposes.⁸⁷

As for the Pondicherry Local Telephone Exchange System it is known to have gone into operation on 16 September 1947 with a 50 line RAX* connected to Cuddalore exchange with 30 working connections. The RAX was replaced by a CBNM board** on 7 December 1954. To cope up with the increased demand for telephone connections, a second CBNM board was added subsequently.

On 7 January 1956, the Pondicherry telephone system was converted into a C.B. multiple board of 300 lines. In 1958 it was further strengthened by adding the fourth C.B. multiple board of 120 lines. As on 30 March 1959, there were 354 telephone connections with one exchange and seven public call offices in Pondicherry region. The fifth and sixth C.B. multiple boards were added in 1961 and 1963 respectively. With effect from November 1963, the message rate system was introduced in Pondicherry. The equipped capacity was further increased to 960 by adding two more positions on 11 June 1965. By 1966, the total working connections went up to 645 with 86 extensions. The equipped capacity was further increased to 1080/1200 by adding two more positions on 16 July 1968. By this time the working connections of the Pondicherry telephone system went up to 807 (main) and 106 (extensions). The 'Own Your Telephone Scheme' was introduced on 16 July 1968. As on 30 November 1970, the total working connections were 979 main with 149 extensions. There were six private branch exchanges with 86 extensions and 14 junctions and two private automatic exchanges with 17 extensions and three junctions working in this system.

The formation of a Telephone Sub-Division having jurisdiction over the Tindivanam-Villupuram and Pondicherry branches was approved in 1969 and came to be formally inaugurated on 15 September 1969. The Telephone Systems pertaining to South Arcot District viz., Arakandanallur, Gingee,

* Rural automatic exchange.

** Central Battery non-multiple board with 100 lines.

Tirukkoyilur, Kallakurichchi, Villupuram and Thiagadurgam were made over from Pondicherry Sub-Division to Villupuram Telegraph Sub-Division which was formed on 11 January 1971. The portion pertaining to South Arcot District viz., Marakkanam, Tindivanam and Vikravandi were made over to the Sub-Division Telegraph, Villupuram with effect from 5 June 1976. The present Pondicherry Telephone Sub-Division consists of the Telephone System at Pondicherry, Villiyannur, Kandamangalam, Valavanur, Kariyamanikkam and Tirukkanur. The Pondicherry Telephone Exchange was of 2,000 lines capacity with total working connections of 1859 main and 229 extensions as on 30 June 1976. There were 12 private branch exchanges with 108 extensions and 24 junctions and five private automatic exchanges with 42 extensions and nine junctions working in this system as on 30 June 1976. The work on the sanctioned scheme to instal 3,000 lines Major Automatic Telephone Exchange at Pondicherry was in progress. As an interim measure, a sub-exchange with 360 lines capacity manual was proposed for installation in the Industrial Estate at Tattanchavadi, Pondicherry.

The Pondicherry Trunk Telephone Exchange with a T. 32 pattern trunk board was established at Pondicherry on 13 April 1957. With the growth of trunk traffic, a second T. 32 board was installed on 12 July 1964. The T. 32 pattern trunk boards were replaced by T. 43 latest trunk boards with four positions on 11 June 1968 with one Record position. With further increase in trunk traffic the number of trunk boards was increased to seven with three O.G.*, two C.I.T.† with one L.E.R.‡ and one R.E.R.§ on 3 April 1970. The S.L.O.D.** circuit between Pondicherry and Madras was introduced on 19 October 1965 with a view to quickening the trunk service by enabling the Pondicherry operator to land on Madras subscribers directly without the aid of the Madras Trunk Exchange. Under this sytem M.L.O.D.*** working was made possible between Pondicherry, Bangalore, Vellore, Coimbatore, Madurai, Secunderabad, Bombay and Kanpur.

The Trunk Exchange at Pondicherry was having the following positions viz., O.G.-6, C.I.T.-2 and L.E.R.-2. In addition to this a facility called 'no delay service' was available between Pondicherry and Madras and between

* Out-going

** Single link-Operator dialling

† Combined incoming and transit

*** Multi link-Operator dialling

‡ Left end record

§ Right end record

Pondicherry and New Delhi. A direct circuit to Karaikal was also available. The following were the trunk circuits terminating at Pondicherry :

(i)	With Cuddalore	..	..	..	3 circuit(s)
(ii)	With Karaikal	..	..	..	1 „
(iii)	With Madras	..	..	..	10 „
(iv)	With New Delhi	..	..	..	1 „
(v)	With Panruti	..	..	..	1 „
(vi)	With Tindivanam	..	..	..	1 „
(vii)	With Tiruchchirapalli	..	..	..	2 „
(viii)	With Villupuram	..	..	..	3 „

With SAXs Trunks :

(ix)	With Kariyamanikkam	..	..	..	2 circuits
(x)	With Villianur	..	..	..	2 „
(xi)	With Kandamangalam	..	..	..	2 „

A long distance public call office connects Vanur with the Pondicherry Telephone Exchange. A coaxial trunk cable connecting Madras, Pondicherry, Cuddalore, Chidambaram, Kumbakonam, Thanjavur etc., was being laid to be commissioned soon. This would facilitate the opening of many additional trunk circuits from Pondicherry to other stations.

Telex Exchange : A Telex Exchange with 20 lines capacity was commissioned on 29 March 1976 and 12 Telex subscribers were provided access to both National and International Telex Exchanges.

Pondicherry Carrier Station : A three-channel stackable carrier system was introduced between Pondicherry and Villupuram on 12 July 1964. A 1+1 Carrier System (ITI type) between Pondicherry and Cuddalore was commissioned on 10 March 1965. This was further strengthened with the installation of another three-channel group carrier (transistorised) in this line on 14 July 1969. A S+3 DX FM* voice frequency telegraph was commissioned for teleprinter working between Pondicherry CTO and Madras CTO. An eight-channel carrier system between Pondicherry and Villupuram was also in operation.

* Frequency modulator

The Kariyamanikkam Automatic Telephone Exchange : An automatic telephone exchange having a capacity of 25 lines was declared open on 1 January 1966 at Kariyamanikkam in Nettappakkam Commune. This was the first of its kind set up in this Territory. The exchange was of SAX† type with 22 working connections as on February 1971 with trunks connected to Pondicherry Exchange. This was expanded into a 50 lines exchange and further expanded to 100 lines with effect from 30 March 1976.

The Villianur Automatic Exchange : A 25-line SAX was opened at Villianur on 20 September 1974. The sytem was expanded from 25 lines to 50 lines in March 1976.

Karaikal region :

The telephone exchange in Karaikal with 35-lines PAX‡ and 33 working connections was commissioned on 11 November 1956 in a rented building located at Market Street, Karaikal. The auto-system was converted to a manual system on 7 May 1958 with a 100-line C.B. non-multiple board. The office which then had an equipped capacity of 200-lines was shifted to 185, Poraiyar road on 28 March 1963. Three trunk lines viz., (1) Karaikal—Mayuram, (2) Karaikal—Nagappattinam and (3) Karaikal—Tarangambadi (long distance PCO) were terminated. To cope up with the heavy trunk traffic, one T. 32 trunk board was installed on 11 March 1967 having connections with Nagappattinam, Mayuram and also Tittachcheri (long distance PCO). To meet the increase in traffic one 1+1 carrier system was installed on 22 September 1969 between Nagappattinam—Karaikal and one Stackable Carrier System with one-channel between Karaikal—Mayuram. One long distance PCO Ambagarattur was also provided. As on December 1970 the exchange functioned with an equipped capacity of 260-lines and with 190 direct working connections and 26 extensions. At present the Karaikal Telephone System is provided with a 400-line MAX II Exchange having 287 direct lines with nine public call offices. The following are the long distance public call offices connected to Karaikal Exchange :

- (i) Tittachcheri.
- (ii) Ambagarattur.
- (iii) Nedungadu
- (iv) Tirumalarajanpattinam.

† Small Auto Exchange

‡ Private Auto Exchange

The T. 43 Trunk Exchange at Karaikal is having one C.I.I., one O.G. and one Record Position :

The following trunk circuits are terminated at Karaikal :

- | | | |
|-------|------------------------|-------------|
| (i) | Karaikal—Nagappattinam | 3 circuit/s |
| (ii) | Karaikal—Mayuram | 2 „ |
| (iii) | Karaikal—Tiruvavur | 2 „ |
| (iv) | Karaikal—Pondicherry | 1 „ |

Mahe region :

The Mahe C.O. was opened before 1891. The public call office was opened on 3 March 1955. It had four extensions to the Administrator's Office, Police Station, Electricity Office and the Government Hospital. A telephone exchange with an equipped capacity of 50 lines of SAX type was opened on 25 July 1965. Another 50 line SAX (B unit) was added on 30 September 1968.⁸⁸ The working connections as on 31 March 1970 were 64.⁸⁹ The New Mahe C.O. was opened on 15 September 1953 and the public call office was opened on 25 October 1953. The Chockli Telephone Exchange serves Pallur with an extension to Pallur Police Station.

Yanam region :

An automatic telephone exchange with an equipped capacity of 10 lines, connecting Yanam to Kakinada, was opened at Yanam in 1957. It was expanded with an equipped capacity of 25 lines. The number of working connections which was six in the year 1960 went up to 15 as on 31 March 1970.⁹⁰ There is also a public call office in Yanam.

VIII. All India Radio

The Pondicherry Station of All India Radio (of one KW strength) was commissioned on 23 September 1967. It is a full-fledged programme originating station headed by a Station Director. While the studios are situated on Cours Chabrol, the Transmitter and the Receiving Centre are located at a distance of 6 km. and 8 km. from the studios respectively. The station operates on a frequency of 1060 KHz.

Beginning with only one transmission in the evenings, the Pondicherry station expanded to put out three transmissions (morning, afternoon and evening) for a total duration of about 9 hours. Of this, like the other stations in the

South, more than 6 hours were accounted for by originated programmes comprising talks, discussions, interviews, plays, features, classical music, light music, folk and traditional music, devotional music, film music, programmes for women, children and the youth, etc. For the benefit of the agriculturists in this area, the station relays the 'Uzhavar Ulagam' programme from Tiruchirapalli on six days a week and originates a thirtyfive-minute programme entitled "Thoppum Thuravum" once a week. A half-hour programme in French is also broadcast three days a month.

The station's news unit which started functioning in May, 1970 puts out a daily five-minute Regional News Bulletin in Tamil, a 15-minute weekly News Reel and also a five-minute 'Newsletter from Pondicherry' once a month.

The programmes of Pondicherry station can normally be heard within a range of 65 km. although during fine weather the station would be audible as far as Madras in the north and Karaikal in the south. The radio stations of Thiruchchirapalli, Kozhikode and Vijayawada serve the regions of Karaikal, Mahe and Yanam.

IX. Organisations of owners and employees in the field of transport and communication

The Pondicherry Bus Owners Motor Transport Association formed on 20 March 1959 with about thirty members was active in the beginning, especially when applications were called for the grant of inter-state bus routes.

The Pondicherry Lorry Owners Association which came into being on 1 July 1960 with about 20 members confines its activities to safeguarding the interests of lorry owners in the Territory.

There is no other registered Association or recognized Trade Union representing transport workers in the Territory. In 1970, a five-member standing Tripartite Committee with representatives of employers, employees and the Government was formed as provided for in the Motor Transport Workers Act, 1961 and in order to implement, review and resolve labour and management problems in the transport industry in the Territory. The Pondicherry Motor Transport Owners Association, the Pondicherry Lorry Owners Association and the Puthuvai Motor Vahana Thozhilalar Sangam are represented in the Committee.⁹¹

X. Ports and Lighthouses

Ports :

Pondicherry :

The archaeological findings of Arikamedu* have established beyond doubt the existence of a Roman emporium, very much like a treaty port, on the Coromandel Coast very near modern Pondicherry. '*The Periplus of the Erythrean Sea*' (C.A.D. 60-100) mentions three principal trading ports to which resorted the merchants of '*Limurike*' otherwise known as '*Damirica*' or '*Dimirica*' etymologically equivalent to the Tamil land. The three ports are Kamara, Poduke and Sopatma. Ptolemy mentions Sabouras *emporion* (unidentified) and Poduke *emporion* after referring to Khabaris. Khabaris has been identified with Kaveripatinam. Sopatma of the Periplus has with some plausibility been identified with Marakkanam or So-pattinam as referred to in Tamil literature. The geographical position of Arikamedu is said to be consistent with the general indications given for Poduke by the *Periplus* and Ptolemy.⁹²

The discovery of Chinese celadon wares at Arikamedu shows that ships engaged in the China trade must have also called at this port.⁹³ The plain celadon wares are dated earlier than the decorated ones. The Arikamedu specimens which are invariably plain have been ascribed to the period between the tenth and twelfth centuries A.D.†. Jouveau Dubreuil puts forth the claim that this port must have been in contact with the Far East through Malacca and Sumatra even in the middle ages.⁹⁴

Barros in his book '*Da Asia*' which he wrote in the year 1553 presents the geography of India as it was known in the days of St. Francis Xavier.

* Archaeological attention was first directed to the site by M.G. Jouveau Dubreuil in 1937 and then in 1941 by L. Faucheux and finally by R.E.M. Wheeler in 1945. *Vide* also L. Faucheux : *Une vieille cité indienne* (Pondicherry 1945), p. 2.

† The export trade in celadon became brisk in the Sung period (A.D. 960-1270) and reached its peak under the Yuan dynasty (A.D. 1280-1368). The celadon wares found at Arikamedu have all the characteristics of the Sung and Yuan Lung Chuan wares meant for export trade.

Pondicherry is among the ports on the Coromandel Coast mentioned by him where the Portuguese had their factory. Besides Pondicherry, the ports of Kalapet and Kunnimedu are also mentioned by him. Interestingly, Tirumalajaranpattinam in Karaikal region also finds mention.⁹⁵ Having lost the patronage of Muthu Krishnappa Nayaka in 1614 the Portuguese abandoned the port which came to be occupied by the Dutch in 1618.⁹⁶ The Danes came in 1624 and stayed upto 1657.

François Martin who made a study of the sites between Porto Novo and Madras found that Pondicherry would be the best place for establishing the loge. With the advent of the French in 1673, Pondicherry again became an important trading port and trade by sea grew steadily with many French as well as other foreign ships calling at the port.

Bhimsen who accompanied Aurangzeb during his Deccan campaign has left us some interesting information about the port of Pondicherry as he found it in the year 1694-95. "There are many ports on the coast; we looked at Phulchery port from outside. It is a strong fort of the French and the Dutch live here. They have guns artillery material in fine weapons. Here articles of high price are bought and sold. The chief Zamindars and Rajas of the country buy them, or the Europeans sell to one another.... Grain comes from Bengal and other parts in ships in such quantity that after laying in a store for the whole year, they sell (the surplus) at an enhanced price and derive a large profit. Articles like wheat, lentil, *mash (dal)* both green and black (*tur*) and other grains come in ships and these things are sold in abundance to the imperial army."⁹⁷

Between 1683 and 1720 French ships ranging from one to three called at the port of Pondicherry every year. After 1742, though the situation further improved under the governorship of Dupleix, trading activities were hampered by war. Nevertheless, at least three to four vessels called at the port. This included sometimes warships. The Pondicherry port had trade relations with Devanampattinam, Parangipettai, Tarangambadi, Karaikal, Nagappattinam, Marakkanam, Madras, Chandernagore, Mahe, Surat, Bombay etc. and also with outside countries like China, France, Siam, Colombo, Manila etc.

Early in 1675, the French had tried to bring to the town warships from the sea through the mouth of the river Gingee which then joined the sea near Kirapalaiyam.⁹⁸ Their efforts did not, however, succeed. François Martin also attests to the fact that in 1675 the frigate 'La Diligente' which usually anchored on the roadstead, made an attempt although unsuccessfully, to make its entry into the river.⁹⁹ In April 1675, a ship actually entered the river of which François Martin mentions in his *Memoires*. The coaster 'Guiche' of the *Compagnie des Indes* which sailed between Chandernagore, Pondicherry and Calicut was usually berthed for shelter in the river.¹⁰⁰ In those days the Ariankuppam river joined the sea near the town at Kirapalaiyam. Being for the best part of the year in contact with the sea, the river was utilised for mooring the ships. In fact the map of de Fer (1705)¹⁰¹ indicates the depth of the river as 12 brasses at one point and eight brasses at another point a little towards the interior.

The famous Le Gentil who visited Pondicherry in 1769 informs us that the flood waters had caused a new opening for the river near Ariyankuppam.¹⁰² This new opening seems to have persisted while the old estuary eventually disappeared. In the course of the XIX century access to the river became more and more difficult due to sand bars which closed the mouth of the river. The added influence of the southern wind blowing towards the east and west from April to September precipitated the process. The boats naturally abandoned the river and started discharging their cargo on the shore by means of country vessels. The landing operations were thereafter carried out between the ships and the shore. The goods were brought to the shore in boats called 'chelingues'.¹⁰³ These goods were stocked in godowns on the shore wherefrom they were transported to the interior of the town in bullock carts. It has been reckoned that in 1837 as much as 90 per cent of the goods were landed by means of country boats.¹⁰⁴ The difficulties involved in these operations prompted the administration to build a pier which was inaugurated on 15 August 1866. Built of iron, the pier spanned a distance of 192 metres in the beginning. It was extended in 1881-82 by 64 metres and then in 1908-1909 by another 80 metres thus reaching out to a total length of 336 metres.*

* While Girod (op.cit.) places the original length of the pier at 180 metres Closets d'Errey puts it at 192 meters *vide*—*Précis Chronologique de l'Histoire de l'Inde Française*, p. 86. Girod places the total length of the pier at 345 metres.

The inauguration of a steamship service between Pondicherry and France on 17 November 1862 marked a big stride towards modernisation of Pondicherry's overseas communication. The arrival of the steamship 'Godavery' through the Suez Canal for the first time in 1869, marked the inauguration of the steamship service between France and the Far East. Pondicherry very soon became a port of call for all ships sailing from France to the Far East. In 1880, came up a proposal to convert the pier into a harbour. But in due course Pondicherry port lost much of its importance compared to the rival ports on the Coromandel Coast. The imposition of an ad-valorem duty (1894) on goods entering French India dealt a severe blow to the prosperity of French Indian ports. The introduction of railways in British India was yet another factor responsible for the decline of trade carried through these French ports. Consequently only improvement to the pier or at best the construction of a small port (**port de batelage**) was envisaged.¹⁰⁵ There were two cranes to help unload cargo and trailors to remove them to the warehouses. In spite of all these facilities the pier was seldom utilised for unloading operations.

Nevertheless, in the year 1904 as many as 413 ships with an aggregate burden of 6,83,727 tonnes called at the French Indian ports.¹⁰⁶ The port was very active in the thirties when ground-nut formed an important item of export. The other major item of export was cotton piece goods. Imports amounted to nearly 12,000 to 15,000 tonnes of general cargo, luxury goods and liquor. Details of ships which called at this port during the year 1936, 1937 and 1938 are given below.¹⁰⁷

			Year 1936	Year 1937	Year 1938
<i>Steamships</i> (Navires a vapeur)	{ France	..	20	21	21
	{ Other countries	..	47	53	50
<i>Coasters</i> (Caboteurs)	{ France	..	—	—	—
	{ Other countries	..	86	86	79
<i>Sailing Vessels</i> (Voiliers)	{ France	..	—	—	—
	{ Other countries	..	14	24	32
			167	184	182

During the II World War period trade was almost at a standstill and after the war it revived to some extent. Before World War II the port had more than 150 country boats (masula boats) of 2½ tons capacity specially built to ride surfs. But with the closure of traffic during the World War their number dwindled to 50-60.¹⁰⁸ However on 30 November 1952, the metallic pier was damaged by a cyclone, rendering it totally unserviceable. Details of port traffic during 1950-60 are given below :

Sl. No.	Year	No. of ships	Nett tonnage	Import	Export
(In tonnes)					
1.	1950	237	286,487	40,484	8,478
2.	1951	201	298,642	31,399	8,402
3.	1952	156	264,549	15,008	10,443
4.	1953	170	265,540	14,708	6,467
5.	1954	59	245,111	12,017	4,150
6.	1955	30	129,466	1,946	1,084
7.	1956	49	140,336	1,619	1,566
8.	1957	57	168,262	7,026	3,066
9.	1958	47	160,173	2,124	1,780
10.	1959	35	130,409	629	3,693
11.	1960	35	139,275	1,003	11,072

With merger in 1954 the import of consumer goods and the export of textiles to the French colonies in Africa practically disappeared. Pondicherry which so far enjoyed special privileges as a free port and flourished as a centre of international trade and commerce began to loose much of its importance. By 1961 the number of country boats and boatmen declined to 30 and 250 respectively.

So far as port administration was concerned, Pondicherry port was placed under the control of the Port Officer, Cuddalore soon after merger. The Government of India, seized of the need to reverse the trend of declining trade, was left with the choice of either renovating the old pier or building a new one instead. The cost of renovation itself was found prohibitive. Even such a huge expenditure was not expected to bring commensurate benefit. Moreover there was not enough storage space anywhere nearby. The construction of a new pier was therefore considered more feasible, as it could be provided with such additional facilities as storage, accommodation, rail lines etc. The site close to Dupuypet and Vembakirappalaiyam was selected. About 200 families had to be displaced to start the construction work. It was, however decided to build a new colony for the displaced persons. The work on the project estimated to cost Rs. 29.42 lakhs* was inaugurated on 24 November 1956 and the work was executed under the direct supervision of the Ministry of Transport, Government of India.¹⁰⁹ The construction work was delayed owing to technical difficulties and some changes in the original design. The new pier as designed by the Ministry of Transport and Communications was commissioned on 26 October 1962.¹¹⁰ The project which included the construction of a reinforced concrete pier 365.6 metres (1,200 feet) long and 6.07 metres (20 feet) wide, was to be provided with six fixed cranes to handle cargo, railway sidings, cargo transit shed and other port facilities. The pier had ultimately a total length of only 283.92 metres (936 feet) with a pier head breadth of 15.16 metres (50 feet).

The port which is connected to the Southern Railway has two separate sidings. The sidings are linked to the pier working head by trolley lines which run through the port area. It is also equipped with the most modern equipment like electric wharf cranes. The facilities are on a scale appropriate to the needs of an intermediate port. The port is provided with adequate space for stocking more than two lakh tons of iron ore and a godown with a capacity of 800 tons of general cargo. There are also several large godowns close by, which belong to the 'Chambre de Commerce'. Each of these godowns have a capacity of stocking 2,000 to 3,000 tons of fertilizers. The ships anchor at about two to three km. from the shore depending upon the draught. With the above facilities this port can handle bagged cargo at the rate of 600 to 800 tons a day during fair weather i.e., from January to October.

* The estimate was subsequently revised to Rs. 41.20 lakhs owing mainly to the spurt in the cost of materials, mechanical equipments, etc.

Even after the completion of the pier project, the port seemed to languish for want of adequate traffic. Though the handling capacity of the port was around 3 lakh tonnes per annum, the utilisation was as low as 0.2 per cent.¹¹¹ In the meanwhile to relieve congestion in the Madras port, export of iron ore from Bellary District was diverted to Pondicherry. Coal for the Southern region was also brought direct to Pondicherry port.¹¹² The situation further improved when in 1965 the Mineral and Metal Trading Corporation allotted iron ore to the port for export to Japan. About 70,000 tonnes of iron ore were handled in the port during that year. But the iron ore traffic on trial basis by the Mineral and Metal Trading Corporation dwindled and was completely stopped due to difficulties in handling bulk cargo. Subsequently, in the year 1966 the Government of India allotted on an experimental basis fertiliser cargo intended for the High Yielding Variety Programme to be unloaded at the port. With just a modest beginning of a discharge rate of 250 tonnes per day in December 1966, it reached 1,000 tonnes per day in December 1967. For the first time during 1968-69 transshipment of wheat was undertaken by the port successfully and the total cargo handled was 96,779 tonnes.¹¹³

During the Third Five Year Plan the facilities in the port were expanded. Besides sailing vessels and barges, a 218 H.P. tug (named Sankarabarani) was purchased for the port. The old rails of the trolley lines were replaced by IV line trolley rails. The port was also provided with two mobile cranes and two diesel locos. The construction of three new godowns of 2,000 tonnes capacity each, one loco shed, one emergency repair shop, quarters for Port Officer and Class IV staff, approach road to godowns, compound walls and the replacement of trolley lines were some of the other improvements carried out under the plan. A scheme was also drawn up to provide an all-weather harbour with sheltering facilities for boats in the mouth of river Ariyankuppam. A model study on Ariyankuppam river was conducted in 1969-70 by the Central Water and Power Research Station, Poona, to examine the feasibility of the projects.¹¹⁴ The scheme was reported feasible and a project report was then prepared which also included facilities for coal unloading for the proposed Thermal Power Plant at the river side. Further model studies based on this report were carried out. The scheme was then technically cleared by the Ministry of Transport and Shipping.

Port dues at the following rates were collected till 14 August 1971.

Port dues	.. 1 anna per ton	} for registered tonnage of the ships.
Sanitary dues	.. 2 pies per ton	
Light dues	.. 1 pie per ton	

Droit de constation .. 1 anna per ton of goods loaded or unloaded.

The Indian Ports Act, 1908 (Central Act XV of 1908) was extended to the Pondicherry port with effect from 15 August 1971 and the limits of the port were duly defined. The Indian Ports (Pondicherry) Rules, 1971 was brought into force on 4 August 1971 and the Port Officer, Pondicherry was also declared to be the Conservator of the Port of Pondicherry. The following port dues were notified and the Port Officer was authorised to receive the dues under the said Act :

Vessels chargeable	Rate of port dues	Dues how often chargeable in respect of the same vessel
Sea going vessels of 40 cubic metres and upwards.	(a) Foreign going ship or sailing vessel calling at this port at 10 paise per cubic metre.	(a) Payable on each entry into the port.
	(b) Coasting ships calling at this port at 10 paise per cubic metre.	(b) The payment of port due will exempt the ship for a period of sixty days from liability to pay the dues again at the port.
	(c) Coasting sailing vessel calling at this port at 5 paise per cubic metre.	

The Port Harbour Craft Rules, 1970 for licensing and regulating catamarans and boats and their crew were also notified on the same date.

The Pondicherry Landing and Shipping Fees Act, 1971 was brought into force in August 1971, providing for fees to be levied on all passengers and goods landed from or shipped into any vessel lying or berthed within the limits of any port in the Territory. The revenue earnings were meant to be utilised for the improvement of the port.

Karaikal:

Even in Karaikal port ships anchored in the roadstead. The loading and unloading of goods were usually carried on with the help of 'chelingues'. Whenever 'chelingues' were not found sufficient enough to cope up with the work, additional boats were requisitioned from the neighbouring port of Nagappattinam. ¹¹⁵ Whenever the water level was high in the river, the goods used to be brought upto the warehouses without much difficulty. The 'chelingues' drew close to the warehouses and loaded the goods before returning to the ships at the roadstead to repeat the process. Whenever the water level was low the country boats could not reach upto the warehouses and they anchored along the protection wall near the Port Office. In 1855 the Arasalar seems to have changed its course. The new course of the river was almost rectilinear. The northern bank of the river from the point where the Vanjiar joined the Arasalar was protected by embankments. The warehouses were situated alongside the embankments. A metalled road ran along the northern bank of the Arasalar upto the sea. The goods were stored in warehouses which were not far from Arasalar and Vanjiar. The goods were then brought in by the carts and then loaded into country boats which carried them to the roadstead. Whenever the water level was very low, the goods were transported from the quay upto the mouth of the river in country boats. From there the goods were carried across by port labourers for transhipment to other boats which carried them to the ships anchored far off in the roadstead. These operations involved a lot of additional expense. The geographical position of Karaikal in the midst of the Kaveri delta offered good prospects for export of the commercial products of Thanjavur district. Considering its potentialities various projects were studied to improve the port.

An investigation conducted in 1895 showed that the exportation of goods from Karaikal was more economical than from Nagappattinam, whenever the water level in the river was high. In order not to allow Karaikal port lag behind Nagappattinam a railway line was suggested from the point where

Vanjiar joined the Arasalar upto the sea. This line was to be linked with the Karaikal—Peralam line, to facilitate the transport of goods not only from the warehouses to the roadstead but also from the Karaikal railway station to the warehouses. Getten also proposed some other schemes for the improvement of Karaikal port viz., to protect the river mouth with a view to avoid obstruction, to fix to some extent the sand on the northern bank by plantations, to establish a rail link with the warehouses and quays and if necessary extending it upto the seashore.¹¹⁶

In 1896 a detailed report was submitted by M. Fontaneilles, **Inspecteur des Travaux Publics**, about the various works to be executed for improving the port.¹¹⁷ However it was only in 1907 that a technical committee approved the project drawn up by Raygondaux, **Conducteur des Travaux Publics** who called attention to some of the important works originally proposed by Getten in 1895. In 1909 some of these projects were taken up for implementation with many modifications so as to limit the expenditure within the budget provision of Rs. 1,00,000.

The diminution of water in Arasalar following the construction of Kannambadi dam in 1916 and Mettur dam in 1932 made navigation in Arasalar almost impossible. During 1934-35 ships bringing petroleum and 'huile lourde' twice a year refused to steam into the port of Karaikal. The ships from Singapore which called at Karaikal every week, also experienced difficulty in anchoring there and the shipping company stopped receiving cargo destined for Karaikal. In order to overcome the situation, the French Administration proposed to equip the port of Karaikal on a priority basis and a sum of Rs. 90,000 was voted in the year 1936. However traffic in respect of both import and export in the port continued to decline and by the year 1944 there was practically no traffic in the port.

The port received some attention after merger when the possibility of developing it into a fishing harbour, came to be explored by the Directorate of Fisheries.

Mahe:

The once famous port of Mahe where ships from Europe found anchorage on their way to India, lost its importance with the decline of French power in India. Little sea-borne trade came to be handled by these ports. Under the Customs Conventions entered into with the British Government the port lost its right to carry on trade by sea.

Yanam :

Yanam, situated at the confluence of Coringa and Godavari, is an old river port, handling only coastal trade. There was a regular motor launch service between Yanam and Ayinapuram via Balusutippa, Errangaruvu and Pallamkurru. Small country boats connect the town with the neighbouring river-side villages. While imports consist of paddy and foodgrains, exports consist of coconuts to Vijayawada. As per the Customs Conventions entered into with the British Government, no sea-borne trade was allowed through this port.

Lighthouses :*Pondicherry :*

In the early days, the Red Hills about three km. north of the town and more than 30 metres above sea-level, served as a guide to sea-farers approaching the port of Pondicherry.¹¹⁸

The lighthouse situated on the edge of the sea near 'Place de Gouvernement' was lighted for the first time on 1 July 1836. The light was placed upon a masonry tower of 21 metres height, being 29 metres above sea-level. The light was visible to a distance of 29 km. On 12 September 1931, the fixed light was replaced by a revolving light of 1,000 watts. This light which turns full circle in 36 seconds could be seen from a distance of 28 miles marine.¹¹⁹

The lighthouse started giving trouble and went out of order frequently causing a lot of inconvenience to ships and sea traffic. In an attempt to remedy the situation the Government of India was requested to declare the Pondicherry lighthouse as a General Lighthouse. The Administration also came forward to hand over the lighthouse administration to the Department of Light Houses and Light Ships. About the same time, the Government of India was also convinced of the need to replace the old light with a new one. In 1970 the Department of Light Houses and Light Ships came forward to construct a new lighthouse at an estimated cost of Rs. 14.41 lakhs.¹²⁰ A site measuring 39 ares 05 ca. was acquired for the purpose in Kirapalaiyam village, a little south of the new port office. The Department of Light Houses and Light Ships also agreed to instal an M. F. Radio beacon at Pondicherry as an aid to navigation in the site adjacent to the land acquired for the construction of the lighthouse. A site measuring 1 Ha. 03A. 60 Ca. was selected for the purpose and acquisition proceedings were initiated.

According to the Madras Almanac and Compendium of Intelligence (1844) vessels which touched Pondicherry during the north-east monsoon were required to cast anchor in 10 to 11 fathoms of water, keeping the light from W/1/4N. W. N. W. (The French fathom is equivalent to 5 feet 5 inches.) During the south-west monsoon vessels were required to anchor in six to eight fathoms of water keeping the light from W to W. 1/4 N.W. Ships nowadays anchor with the lighthouse bearing 282° (T) distance 800 to 1,200 metres in five to six fathoms of water.

A red signal light was first installed on top of a mast at the terminus of the old pier on 22 May 1881 in order to help sea-farers to locate the anchorage and landing spots. A green signal was put up on the same mast. On 28 May 1915 the red light was replaced by an electric bulb (red) which could be seen for a distance of 2.5 km.¹²¹ Whenever the sea was rough, landing operation used to be suspended. The new pier is also provided with a red signal light.

Karaikal :

A lantern situated at 10°55' N. latitude and 79°24' E. longitude, served as a lighthouse for the port of Karaikal. It was placed upon a masonry tower of 13ms. height to the north of Arasalar. On 1 November 1973 the fixed light was replaced by an eclipse type of electric light with reflector.

Mahe :

The lighthouse constructed in 1935 is a reveted steel frame structure of 15 metres height. It is fitted with a kerosene light the rays of which are magnified by lenses. The red light which is visible for a distance of about five km. is intended to warn moving ships of the rocks.

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CHAPTER—VIII

MISCELLANEOUS OCCUPATIONS

I. The distribution pattern of the working population.

The distribution pattern of the working population under various occupations is dealt with in this Chapter. The entire population of the Territory may be divided into two broad categories viz., workers and non-workers. The working population in the Territory formed 37.49 per cent of the total population according to the 1961 census. While the population increased from 3,69,079 in 1961 to 4,71,707 in 1971, the working population increased from 1,38,370 to 1,41,025. But during the same period the percentage of working population declined from 37.49 per cent in 1961 to 29.90 per cent in 1971.

The working population may further be distributed under nine industrial categories as given below on the basis of the census data of 1961 and 1971 :

Industrial categories		1961		1971	
1.	Cultivators ..	22,054	(15.94 %)	16,709	(11.85 %)
2.	Agricultural labourers ..	38,807	(28.05 %)	46,275	(32.81 %)
3.	Mining, quarrying, livestock, forestry, fisheries ..	7,678	(5.55 %)	7,477	(5.30 %)
4.	Household industry ..	7,506	(5.42 %)	2,525	(1.79 %)
5.	In manufacturing other than in household ..	17,317	(12.52 %)	22,718	(16.11 %)
6.	Construction ..	3,659	(2.64 %)	4,457	(3.16 %)
7.	Trade and commerce ..	13,352	(9.65 %)	15,592	(11.05 %)
8.	Transport, storage and communication ..	3,279	(2.73 %)	3,575	(2.54 %)
9.	Other services ..	24,718	(17.86 %)	21,697	(15.39 %)
		1,38,370	(100.00 %)	1,41,025	(100.00 %)

It may be gathered from the above statement that as per the 1971 census 62,984 were engaged in agriculture either as cultivators or agricultural labourers. This works out to 44.66 per cent of the total working force. While the percentage of cultivators declined from 15.94 per cent in 1961 to 11.85 per cent in 1971, that of agricultural labourers increased from 28.05 per cent to 32.81 per cent during the same period. This reflects a significant development in the agricultural sector.

The occupational pattern here is quite diversified. This is reflected in the relatively smaller percentage of workers engaged in agriculture.* About 16 per cent of the working force are engaged in non-household manufacturing concerns. The large percentage of employment in industries is partially due to the well established cotton textile and sugar mills in the Territory. There is a sharp decline in the number of workers engaged in household industry reflecting a decline in the household industries. The number of workers in the manufacturing industry, construction, trade and commerce, transport and communication has registered an increase. Employment in 'other services' is large because of the relatively larger number of personnel required to man the administrative services of the Territory. However the percentage of workers in the services has registered a slight decline during the period. Owing to the long coast-line, fishing is also well developed. This accounts for the large fishing population. The number of workers engaged in livestock and fisheries has however remained more or less steady.

Here in this Chapter we are more concerned with the occupational classification of the working population which is based on the nature of basic tasks involved in each occupation than on the type of industries. For the purposes of the 1961 census, occupations were divided into 331 occupational families, grouped under 75 occupational groups falling under ten broad divisions. The region-wise break up of workers (other than those engaged in agriculture) under 70 out of the 75 occupational groups according to the 1961 census is furnished below : 1

Group Code No.	Groups	Union Terri- tory	Pondi- cherry region	Karaikal region	Mahe region	Yanam region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0. Professional, technical and related workers :						
00 — Architects, Engineers and surveyors	208	172	21	12	3
02 — Biologists, veterinarians, agronomists and related scientists	39	23	13	—	3

* It was 61 per cent in Tamil Nadu.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
03 — Physicians, surgeons, dentists		303	198	72	27	6
04 — Nurses, pharmacists and other medical and health technicians		545	402	102	31	10
05 — Teachers		1,732	1,128	368	192	44
06 — Jurists		74	39	19	12	4
07 — Social scientists and related workers		94	65	20	8	1
08 — Artists, writers and related workers		299	183	100	10	6
09 — Draughtsmen and science and engineering technicians not elsewhere classified		461	40	3	2	1
0x — Other professional, technical and related workers		652	390	214	37	11

1. *Administrative, executive and managerial workers :*

10 — Administrators and executive officials—Government ..	338	246	54	27	11
11 — Directors and managers, wholesale and retail trade ..	34	20	9	2	3
12 — Directors, managers and working proprietors—Finan- cial institutions	14	11	1	2	—
13 — Directors, managers and working proprietors—Other ..	893	449	244	181	19

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>2. Clerical and related workers :</i>						
20 — Book-keepers and cashiers ..	727	454	259	10	4	
21 — Stenographers and typists ..	242	216	15	8	3	
22 — Office machine operators ..	6	6	—	—	—	
28 — Clerical workers—Miscellaneous	3,452	2,741	554	107	50	
29 — Unskilled office workers ..	826	620	122	52	32	
<i>3. Sales workers :</i>						
30 — Working proprietors, whole sale and retail trade ..	8,114	4,840	2,646	430	190	
31 — Insurance and real estate salesmen, salesmen of securities and services and auctioneers ..	277	175	94	6	2	
32 — Commercial travellers and manufacturers' agents ..	1,237	753	463	16	5	
33 — Salesmen, shop assts. and related workers	2,099	1,382	580	84	53	
34 — Money-lenders and pawn-brokers	32	10	20	2	—	
<i>4. Farmers, fishermen and related workers :</i>						
40 — Farmers and farm managers	270	58	171	26	15	
41 — Farm workers	3,980	3,060	769	72	79	
42 — Hunters and related workers	16	13	—	3	—	
43 — Fishermen and related workers	4,715	2,764	1,144	512	295	
44 — Loggers and other forestry workers	63	57	4	2	—	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
5. Miners, quarrymen and related workers :						
50 — Miners, quarrymen	40	1	—	37	2	
51 — Well drillers and related workers	13	11	—	2	—	
6. Workers in transport and communication occupations :						
60 — Deck officers, engineer officers and pilots, ship	5	5	—	—	—	
61 — Deck and engine-room ratings (ship) barge crews and boatmen	200	100	4	—	96	
63 — Drivers and firemen (Railway engine)	14	9	1	1	3	
64 — Drivers, road transport ..	2,226	1,730	420	36	40	
65 — Conductors, guards and brakesmen (Railway) ..	6	6	—	—	—	
66 — Inspectors, supervisors, traffic controllers and despatchers-transport ..	26	12	11	3	—	
67 — Telephone, telegraph and related telecommunication operators	35	27	7	—	—	
68 — Postmen and messengers ..	113	70	32	9	2	
69 — Workers in transport and communication occupations, not elsewhere classified ..	145	103	38	2	2	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>7&8. Craftsmen and production process workers and labourers not elsewhere classified :</i>						
70 — Spinners, weavers, knitters, dyers and related workers ..	10,812	10,249	51	371	141	
71 — Tailors, cutters, furriers and related workers	1,380	1,011	249	88	32	
72 — Leather cutters, lasters and sewers (Except gloves and garments) and related workers	223	167	37	1	18	
73 — F u r n a c e m e n, rollers, drawers, moulders and related metal making and treating workers	424	348	62	8	6	
74 — Precision instrument makers, watch makers, jewellers and related workers	899	591	232	54	22	
75 — Tool-makers, machinists, plumbers, welders, platers and related workers	1,328	1,179	114	13	22	
76 — Electricians and related electrical and electronics workers	691	585	86	14	6	
77 — Carpenters, joiners, cabinet makers, coopers and related workers	1,663	1,186	354	90	38	
78 — Painters and paper hangers ..	200	143	55	2	—	
79 — Bricklayers, plasterers and construction workers not elsewhere classified ..	1,949	1,483	405	47	14	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
80 — Compositors, printers, engravers, book-binders and related workers	210	191	16	3	—	
81 — Potters, kilnmen, glass and clay formers and related workers	607	492	95	1	19	
82 — Millers, bakers, brewmasters and related food and beverage workers	1,504	1,045	345	83	31	
83 — Chemical and related process workers	771	61	16	—	—	
84 — Tobacco preparers and products makers	319	42	117	158	2	
85 — Craftsmen and production process workers not elsewhere classified	588	387	180	6	15	
86 — Testers, packers, sorters and related workers	42	39	2	—	1	
87 — Stationary engine and excavating and lifting equipment operators and related workers.	408	350	54	4	—	
88 — Labourers. not elsewhere classified	10,973	6,794	2,648	866	665	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>9. Service, sport and recreation workers :</i>						
90 — Fire fighters, policemen, guards and related workers ..	1,705	1,336	281	52	36	
91 — House-keepers, cooks, maids and related workers	3,389	2,242	665	444	38	
92 — Waiters, bartenders and related workers	524	348	124	36	16	
93 — Building care-takers, cleaners and related workers ..	824	656	120	24	24	
94 — Barbers, hairdressers, beauticians and related workers ..	691	492	159	32	8	
95 — Launderers, dry cleaners and pressers ..	1,592	1,322	200	23	47	
96 — Athletes, sportsmen and related workers ..	6	3	1	2	—	
97 — Photographers and related camera operators	33	20	11	1	1	
99 — Service, sport and recreation workers not elsewhere classified	54	27	23	2	2	
<i>X. Workers not classifiable by occupation :</i>						
x8 — Workers reporting occupation unidentifiable	232	153	26	53	—	
x9 — Workers not reporting occupation	12	5	—	7	—	
	77,509	55,536	15,322	4,448	2,203	

More than 82 per cent of the non-agricultural working population were involved in one or other of the following eighteen occupational groups which engaged more than 1,000 workers in the Territory according to the 1961 census :

Code	Occupational groups	No. of workers
89 — Labourers.	10,973
70 — Spinners, weavers, knitters, dyers and related workers	10,812
30 — Working proprietors (wholesale and retail trade)	8,114
43 — Fishermen and related workers	4,715
41 — Farm workers	3,980
28 — Clerical workers—Miscellaneous	3,452
91 — House keepers, cooks, maids and related workers	3,389
64 — Drivers (Road Transport)	2,226
33 — Salesmen, shop assts. and related workers	2,099
79 — Bricklayers, plasterers and construction workers..	1,949
05 — Teachers	1,732
90 — Fire fighters, policemen, guards and related workers	1,705
77 — Carpenters, joiners, cabinet makers, coopers and related workers	1,663
95 — Launderers, dry cleaners and pressers	1,592
82 — Millers, bakers, brewmasters and related food and beverage workers	1,504
71 — Tailors, cutters, furriers and related workers	1,380
75 — Tool makers, machinists, plumbers, welders, platers and related workers	1,328
32 — Commercial travellers and manufacturers' agents	1,237
Total	68,297

The following 12 occupational groups employed 10.9 per cent of the working population :

Code No.	Occupational groups	No. of workers
74	Precision instrument makers, watch makers, jewellers and related workers	899
13	Directors, managers and working proprietors (other) ..	893
29	Unskilled office workers	826
93	Building caretakers, cleaners and related workers	824
20	Book-keepers and cashiers	727
94	Barbers, hairdressers, beauticians and related workers	691
76	Electricians and related electrical and electronic workers ..	691
0x	Other professional, technical and related workers	652
81	Potters, kilnmen, glass and clay formers and related workers ..	607
85	Craftsmen and production process workers not elsewhere classified	588
04	Nurses, pharmacists and other medical and health technicians ..	545
92	Waiters, bartenders and related workers	524
	Total	8,467

Thus the thirty occupational groups put together engaged about 93 per cent of the total working population with the remaining 7 per cent of the workers engaged in as many as 40 different occupations.

For the purpose of the 1971 census, occupations were classified into 462 occupational families, grouped under 95 occupational groups, falling under ten broad divisions. The region-wise break-up of workers (other than those engaged in agriculture) under the 91 of the occupational groups according to the 1971 census is given below : 2

Group Code No.	Groups	Union Terri- tory	Pondi- cherry region	Karaikal region	Mahe region	Yanam region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>01. Professional, technical and related workers :</i>						
00 — Physical scientists		7	3	4	—	—
01 — Physical science technicians		7	5	1	1	—
02 — Architects, engineers, technologists, and surveyors		256	219	33	3	1
03 — Engineering technicians		215	170	29	10	6
04 — Aircraft and ships officers		11	4	5	2	—
05 — Life scientists		51	40	9	1	1
06 — Life science technicians		109	104	1	2	2
07 — Physicians and surgeons, (Allopathic, Dental and Veterinary Surgeons)		1,265	1,022	192	44	7
08 — Nursing and other medical and health technicians		1,176	932	168	51	25
09 — Scientific, medical and technical persons—Other		6	6	—	—	—
10 — Mathematicians, statisticians and related workers		29	27	1	1	—
12 — Accountants, auditors and related workers		521	333	187	1	—

(1)	(2)	(3)	(4)	(5)	(6)	(7)
13 — Social scientists and related workers	242	162	61	13	6	
14 — Jurists	147	109	31	5	2	
15 — Teachers	3,475	2,433	700	263	79	
16 — Poets, authors, journalists and related workers	41	36	5	—	—	
17 — Sculptors, painters, photographers and related creative artists	90	67	19	4	—	
18 — Composers and performing artists	152	83	63	3	3	
19 — Professional workers not elsewhere classified	636	376	217	28	15	
2. Administrative, executive and managerial workers :						
20 — Elected and legislative officials	42	28		7	1	
21 — Administrative and executive officials—Government and Local Bodies	323	270		15	5	
22 — Working proprietors, directors and managers,—wholesale and retail trade	458	281	146	31	—	
23 — Directors and managers—Financial institutions	49	31	13	2	3	
24 — Working proprietors directors and managers—mining, construction, manufacturing and related concerns	165	107	33	25	—	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
25 — Working proprietors, directors, managers and related executives—Transport, storage and communication	72	67	4	—	1	
26 — Working proprietors, directors and managers—Other services	574	279	213	82	—	
27 — Administrative, executive and managerial workers not elsewhere classified ..	4	2	—	2	—	
3. Clerical and related workers						
30 — Clerical and other supervisors	876	678	160	25	13	
31 — Village officials	195	114	75	2	4	
32 — Stenographers, typists and card and tape punching operators ..	415	357	41	10	7	
33 — Book-keepers, cashiers and related workers ..	1,236	997	207	25	7	
34 — Computing machine operators ..	8	7	1	—	—	
35 — Clerical and related workers not elsewhere classified ..	3,968	3,122	608	163	75	
36 — Transport and communication supervisors	100	66	25	8	1	
37 — Transport conductors and guards	137	90	31	5	11	
38 — Mail distributors and related workers	223	153	57	9	4	
39 — Telephone and telegraph operators	81	61	15	4	1	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
4. <i>Sales Workers :</i>						
40 — Merchants and shop keepers- wholesale and retail trade ..	4,852	3,261	1,104	387	100	
41 — Manufacturers and agents ..	153	135	11	5	2	
42 — Technical salesmen and com- mercial travellers	20	16	2	1	1	
43 — Salesmen, shop assistants and related workers ..	4,374	2,927	1,170	187	90	
44 — Insurance, real estate, securi- ties and business service salesmen and auctioneers ..	190	104	83	3	—	
45 — Money lenders and pawn brokers ..	113	94	18	1	—	
49 — Sales workers not elsewhere classified ..	808	303	505	—	—	
5. <i>Service workers :</i>						
50 — Hotel and restaurant keepers	304	205	40	45	14	
51 — House keepers, matrons and stewards (Domestic and insti- tutional)	75	65	10	—	—	
52 — Cook , waiters, bartenders and related workers (Domes- tic and institutional) ..	2,148	1,402	477	237	32	
53 — Maids and related house keeping-service workers not elsewhere classified	1,006	766	134	83	23	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
54 — Building caretakers, sweepers cleaners and related workers ..	1,293	984	241	44	24	
55 — Launderers, dry-cleaners and pressers not elsewhere classified ..	1,330	1,166	126	14	24	
56 — Hair dressers, barbers, beauti- cians and related workers ..	697	485	174	27	11	
57 — Protective service workers ..	1,857	1,364	363	86	44	
59 — Service workers not elsewhere classified ..	1,231	111	10	2	—	
6. <i>Farmers, fishermen, hunters, log- gers and related workers :</i>						
60 — Farm plantation, dairy and other managers and super- visors ..	131	82	43	2	4	
61 — Cultivators ..	151	1	14	—	—	
62 — Farmers, other than culti- vators	43	17	16	5	5	
63 — Agricultural labourers ..	64	15	13	36	—	
64 — Plantation labourers and related workers	1,993	1,243	681	65	4	
65 — Other farm workers	892	675	82	10	125	
66 — Forestry workers	122	86	20	15	1	
67 — Hunters and related workers.	10	9	1	—	—	
68 — Fishermen and related workers	5,282	3,082	1,390	581	229	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
7, 8, 9, <i>Production and related workers— Transport Equipment Operators and Labourers :</i>						
71 — Miners, quarrymen, well drillers and related workers..	57	27	25	5	—	—
72 — Metal processors	194	162	29	3	—	—
73 — Wood preparation workers and paper makers	155	99	21	35	—	—
74 — Chemical processors and related workers	122	78	32	6	6	6
75 — Spinners, weavers, knitters, dyers and related workers ..	10,804	10,041	152	482	129	129
76 — Tanners, fellmongers and pelt dressers	5	4	—	1	—	—
77 — Food and beverage pro- cessors	1,456	980	334	101	41	41
78 — Tobacco preparers and tobacco product makers	418	95	111	210	2	2
79 — Tailors, dress makers, ser- vers, upholsterers and related workers	1,613	1,255	245	82	30	30
80 — Shoemakers, and leather goods makers	264	223	30	6	5	5
81 — Carpenters, cabinet and related wood workers	1,801	1,305	387	75	34	34
82 — Stone cutters and carvers ..	79	19	7	53	—	—
83 — Blacksmiths, tool makers and machine tool operators..	537	450	68	12	7	7

(1)	(2)	(3)	(4)	(5)	(6)	(7)
84 — Machinery fitters, machine assemblers and precision instrument makers (except electrical)	1,709	1,416	235	37	21
85 — Electrical fitters and related electrical and electronic workers	1,024	832	152	32	8
86 — Broadcasting station and sound equipment operators and cinema projectionists	118	84	28	2	4
87 — Plumbers, welders, sheet metal and structural metal preparers and erectors	451	394	41	5	11
88 — Jewellery and precious metal workers and metal engravers (except printing)	698	436	196	54	12
89 — Glass formers, potters, and related workers	369	301	55	1	12
90 — Rubber and plastic product makers	29	18	6	5	—
91 — Paper and paper board products makers	65	38	27	—	—
92 — Printing and related workers	406	353	40	13	—
93 — Painters	300	239	58	3	—
94 — Production and related workers not elsewhere classified	462	273	149	7	23
95 — Bricklayers and other construction workers	2,992	2,216	662	87	27

(1)	(2)	(3)	(4)	(5)	(6)	(7)
96 — Stationary engines and related equipment operators, oiler and greaser	490	413	58	8	11	
97 — Material, handling and related equipment (Operators, loaders and unloaders)	827	643	113	43	28	
98 — Transport equipment operators	2,754	2,078	452	64	160	
99 — Labourers not elsewhere classified	2,512	1,457	791	252	12	
10. Workers not classified by occupations :	7	44	23	3	3	
Grand total ..	78,041	57,472	14,650	4,370	1,549	

According to the 1971 census, the total number of workers (other than those engaged in agriculture) was 78,041. Although the total number of workers had increased from 77,509 in 1961 to 78,041 in 1971 the percentage of workers declined from 37.49 per cent to 29.90 per cent. This decline in the rate of workers is noticed in all the regions and the decline is marked in respect of females.

This decline is attributed to the change in the definition of 'worker' which eliminated the possibility of inclusion of persons who rendered casual assistance under the category of workers. According to the new definition, a person engaged in seasonal work was treated as a worker, if he has or had been working for the greater part of the season. A person engaged primarily in household duties, such as cooking, a boy or a girl who was primarily a student studying in a school was not treated as a worker, even if such a person helped in the economic activities conducted by the family casually. In all such cases, these persons were treated as non-workers in respect of main activity and the economic activity in which they were casually engaged was recorded against secondary work. This is said to be the reason for the decline in the proportion of workers particularly in the case of females.

In all 61,890 of the non-agricultural workers were engaged in one or other of the following 23 occupational groups which engaged more than 1,000 workers, forming 79.3 per cent of the working population in the Territory:

Code No. (1)	Occupational groups (2)	No. of workers (3)
75	Spinners, weavers and knitters, dyers and related workers ..	10,804
68	Fishermen and related workers	5,282
40	Merchants and shopkeepers—Wholesale and retail trade ..	4,852
43	Salesmen, shop assistants and related workers	4,374
35	Clerical and related workers not elsewhere classified ..	3,968
15	Teachers	3,475
95	Bricklayers and other construction workers	2,992
98	Transport equipment operators	2,754
99	Labourers not elsewhere classified	2,512
52	Cooks, waiters, bartenders and related workers (domestic and institutional)	2,148
64	Plantation labourers and related workers	1,993
56	Protective service workers	1,857
81	Carpenters, cabinet and related wood workers.. ..	1,801
84	Machinery fitters, machine assemblers and precision instrument makers (except electrical)	1,709
79	Tailors, dress makers, servers, upholsterers and related workers	1,613
77	Food and beverage processors	1,456
55	Launderers, dry cleaners and pressers not elsewhere classified ..	1,330
54	Binding workers, caretakers sweepers, cleaners and related workers	1,293

(1)	(2)	(3)
07 — Physicians, surgeons (Allopathic, Dental and Veterinary Surgeons)		1,205
33 — Book-keepers, cashiers and related workers		1,236
08 — Nursing and other medical and health technicians		1,176
85 — Electrical fitters and related electrical and electronic workers ..		1,024
63 — Maids and related house keeping service workers not elsewhere classified		1,006
		61,890

The following ten occupational groups employed 7,066 workers forming 9.5 per cent of the total working population :

Code No.	Occupational groups	No. of workers
65 — Other farm workers		892
30 — Clerical and other supervisors		876
97 — Material (operators, loaders and unloaders)		827
49 — Sales workers not elsewhere classified		808
88 — Jewellery and precious metal workers and metal engravers (except printing)		697
56 — Hairdressers, barbers, beauticians and related workers ..		698
19 — Professional workers not elsewhere classified		636
26 — Working proprietors, directors and managers—other services ..		574
83 — Blacksmiths, tool makers and machine tool operators ..		537
12 — Accountants, auditors and related workers		521

Thus in all 33 occupational groups put together engaged 68,956 workers, forming 88.8 per cent of the total working population with the remaining 11.2 per cent of the workers engaged in as many as 62 different occupational groups.

Some of the essential services and occupations are discussed briefly in the following paragraphs :

II. The learned professions.

Civil Services

It was not always so easy to gain entry into the administrative services. Literacy rate was low. Drop-outs were many. Moreover a good number among the educated, found outlets of employment in the vast French empire. The more spirited among the lot opted for military service and proved their mettle in many theatres of war. From the position of 'soldats' quite a few rose to the rank of 'Lieutenants' purely on merit. Some of those who qualified as teachers, engineers, doctors, etc. of French India gained admission into what was known as 'Cadre Métropolitain' and worked in the various French colonies. The attractive emoluments attached to this cadre was incentive enough for the talented to seek entry into this 'cadre'. They were entitled to enhanced children's allowance and pension. This state of affairs continued till about the time the French left.

After merger the administrative set up of the Territory underwent a quick metamorphosis. Secretariat and Non-Secretariat Departments came into being. Alongwith the staff taken over from the French Administration, the services of a large number of deputationists were obtained mostly from Tamil Nadu to man the services. Fresh recruitments were also conducted to fill up the many newly created posts. With the extension of planning to the Territory, it became necessary to employ new hands to implement the several schemes included in the Plan. These development schemes increased the employment opportunities of the people.

The growth in the number of Government employees (Union Territory, Central Government and Municipalities) between 1961 and 1976 will be evident from the following statement :

Year (31 March)			Union Territory employees	Percentage increase	Central Govt. employees	Percentage increase	Municipal employees
(1)			(2)	(3)	(4)	(5)	(6)
1961	..	..	6,552	—	1		
1962	..	..	7,118	+ 8.6%	1,083	—	—
1963	..	..	7,070	— 0.7%	1,184	+ 9.3%	—
1964	..	..	8,029	+ 13.6%	1,274	+ 7.6%	—

(1)		(2)	(3)	(4)	(5)	(6)
1965	.. ..	8,721	+8.6%	1,412	+10.8%	—
1966	.. ..	9,057	+3.9%	1,397	—1.0%	—
1967	.. ..	9,597	+6.0%	1,909	+36.6%	1,374
1968	.. ..	9,814	+2.3%	2,002	+4.9%	1,304
1969	.. ..	10,67	+8.7%	2,037	+1.7%	1,304
1970	.. ..	11,219	+5.1%	2,264	+11.1%	1,412
1971	.. ..	11,969	+6.7%	2,409	+6.4%	—
1972	.. ..	12,484	+4.3%	2,561	+6.3%	—
1973	.. ..	13,058	+4.6%	2,698	+5.3%	—
1974	.. ..	13,765	+5.4%	2,634	+2.4%	—
1975	.. ..	14,452	+5.0%	2,761	+3.3%	—
1976	.. ..	14,993	+3.7%	2,792	+2.6%	1,316

The total number of employees of Pondicherry Administration as on 31 March 1961 was 6,552 of whom 5,118 were regular and 1,434 non-regular employees. It would be seen from the above statement that the total number of employees of Pondicherry Administration increased by 128.83 per cent between 1961 and 1976.

The number of employees of this Administration and the Central Government had more than doubled whereas the position remained the same for Municipalities.

The total number of Central Government employees in the Union Territory of Pondicherry as on 31 March 1962 was 1,083 of whom 1,050 were regular and only 33 were non-regular employees. According to the Census of Government employees published by the Bureau of Statistics for the year 1970 the total number of Central Government employees as on 31 March 1970 was 2,264 of whom 2,130 were regular and 134 non-regular employees. It would be seen from the above data that the volume of employment in the

Central Government Departments increased by 109.04 per cent between 1962 and 1970 and as much as 157.34 per cent between 1962 and 1976. There was a sharp increase during 1966-67 which was due to the establishment of a Hospital attached to the Medical College (Jipmer). As regards the distribution of Central Government employees (inclusive of non-regular staff), it is observed that the maximum number of employees were in the Medical College (Jipmer) numbering 1607 out of the total 2,592. The Posts and Telegraphs Department including Telephones came second with 604 employees. The Railways with 138 employees and Customs and Central Excise Department with 103 employees ranked third and fourth respectively.

The total number of employees in the Municipalities as on 31 March 1970, was 1,412 of which 774 were regular employees and 638 non-regular. Of the 774 regular employees 322 or 41.6 per cent were permanent and the remaining 452 or 58.4 per cent temporary employees.

Teacher :

As on 1 January 1943 the total number of teachers in government schools and colleges was 360 out of 1939 Government employee. There were 15 Professors, 8 Assistant Professors, 41 English Teachers, 139 French Teachers, 143 Tamil Teachers and 14 Sewing Mistresses constituting 18 per cent of the total number of Government employees in 1943. According to the 'Abstract of Statistics 1960' the total number of teachers during 1958-59 was 1,453 of whom 928 were employed by the Government and 525 by private managements. It is seen that during the year 1970-71, the total number of teachers was 3,583 registering an increase of about 146 per cent. This also reflects the significant progress of the educational sector since merger. Another noteworthy feature observed was that out of 3,583 teachers in 1970-71 as many as 1,256 teachers were women.

Medical profession :

In 1943 the Medical corps consisted of 19 doctors, 9 health officers and 133 para medical staff, besides 5 doctors attached to the Colonial troops. After merger public health schemes received high priority in the Five Year Plans resulting in greater demand for medical and para medical workers.

According to the 1961 census, there were 123 physicians and surgeons (Allopathic), 91 ayurvedic physicians, 27 homeopathic physicians, five dentists and 58 other physicians in the Territory. In 1971 this group was classified as 'Physicians and Surgeons (Allopathic) Dental and Veterinary Surgeons' who numbered 1,265 in all. The total number of nurses, pharماسists and other medical and health technicians was 545 according to the 1961 census. By 1971 the number of persons engaged in this occupation increased to 1,176. Among the learned professions, next to education, medical service provide job opportunities for many people.

Legal profession:

The starting of a Law College at Pondicherry in 1876 and prospects of a lucrative practice in the courts at Pondicherry gave encouragement to some of the young graduates to study law and become lawyers. Senior and efficient lawyers were also appointed as Registrars, Judges and Présidents of the Subordinate and Appellate Courts. Other personnel employed in the courts were translators, clerks, and 'Huissiers'. During 1938-39 there were 12 Senior Advocates and five Junior Advocates who could put in their appearance in the courts while undergoing training. After *de facto* transfer the Law College was closed down.

Following the extension of the Central Acts since 1963 and the reorganisation of the judiciary, the Madras High Court was conferred with appellate jurisdiction in respect of suits filed against the decisions of Pondicherry Courts. The advocates of Tamil Nadu were allowed to practise in Pondicherry Courts alongside the local French knowing advocates. A number of advocates from the neighbouring states came and settled in Pondicherry. Moreover, many Pondicherry students after completing the degree course went to Madras to study law. The starting of a Law College in 1971 provided further encouragement to the legal profession.

According to the 1961 census there were 15 judges and magistrates, 33 legal practitioners and advisers, two legal assistants and 24 other persons having connection with legal professions. In 1971, all those engaged in this profession were brought under the group of 'Jurists' and there were as many as 147 of them in the Territory. As in the rest of the country lawyers here too play some part in the public affairs of the Territory although they have not made much dent in the political field.

Engineers :

In 1943 there were 34 engineers and supervisors, eight draughtsmen and three other miscellaneous workers in the Public Works Department. No information about engineers employed in the private institutions during this period is available although it is certain that engineers must have been employed in the mills as well as in other industrial firms. But the 1961 census throws some light on this aspect. In the entire Union Territory there were 93 civil engineers, 21 mechanical engineers, 16 electrical engineers, 13 surveyors and 65 other categories of engineers, surveyors, architects not elsewhere classified. According to the 1971 census there were 256 architects, engineers, technologists and surveyors and as many as 215 engineering technicians in the Territory. It may safely be assumed that the figures given above also include the engineers etc., under private employment.

Artists

The temples, churches and mosques in and around Pondicherry bear clear testimony to the very high standard of skill of Pondicherry's craftsmen. Even now there is no dearth of painters and decorators in Pondicherry. Their workmanship can be seen and appreciated in the decorated marriage pandals and funeral *pallakkus*. Similarly dancing and music flourished under the patronage of the large number of temples. With the onset of printing, Pondicherry made its mark also in the realm of journalism since 1838.

As per the 1961 census, musicians and related workers numbered 153, painters and decorators 68, translators 35, editors, journalists and related workers 21, dancers and related workers nine, actors five, authors four, sculptor and modellers one and artists not elsewhere classified three. In 1971 there were 41 poets, authors, journalists and related workers, 90 sculptors, painters, photographers and related creative artists and 152 composers and performing artists in the Territory.

III. Domestic and personal services.

Barbers :

The barbers belong to the backward castes known as 'Ambattans', 'Navithans', 'Maruthuvars' and 'Pariyaris'. Native customs envisage the presence of the barbers and washermen at all domestic functions and religious ceremonies whether auspicious or not. For their customary duties they are paid mostly in paddy at the time of harvest. Though this practice still continues in some villages, the barbers in some of the villages and in all the towns have opened saloons where they are paid in cash.

In Pondicherry they have formed an Association to look after their interests. This Association fixes the rate for hair cuts, shave, etc. Barbers in the town do not usually attend to their clients at their houses. In villages they function independently but in the city those owning shops are assisted by other paid hands. The workers are paid monthly wages or an agreed percentage of the amount charged for every individual attended by them. The barbers in rural areas however continue visiting the houses of their customers. According to the 1961 census there were 691 persons in the Territory under the category of 'Barbers, hair-dressers, beauticians and related workers.' Their number increased to 697 in 1971. This is almost exclusively a male profession with only one female reporting as a hair-dresser in 1961 and none in 1971.

Washermen :

In 1961 there were in all 1,592 launderers, washermen and dhobies of whom women formed more than one third. In 1971, the total number of launderers, dry cleaners and pressers not elsewhere counted, amounted to only 1,330, with only 283 females engaged in the occupation. A good number of laundries have sprung up both in urban and rural areas with a relatively higher concentration in the urban areas. The practice of dhobies going round the houses for collecting the clothes is fast dying out. Ironing is usually done in the shop itself, while washing is done either in the village or in the *dhobikanas* constructed for the purpose. The practice of carrying washed clothes and delivering them at the premises of the owners is slowly dying. In the rural areas this practice however continues.

Tailors :

During pre-merger days when Pondicherry was a free port, all kinds of foreign textiles, cotton, wool, velvet, silk, etc., imported from Japan, England and France were freely available in the local market giving rise to a great demand for such fabrics. Those who preferred to take them outside the Territory, often got them converted into dresses. A number of tailoring shops sprang up in the town. In between 1949-54 tailors did a flourishing business.

After merger, the teaching of tailoring and embroidery formed an important aspect of the welfare schemes. In the Labour Welfare Centres at Mudaliyarpettai, Gandhinagar, Ariyankuppam and Karaikal the women folk belonging to working class families were taught tailoring and various handicrafts. Thus more opportunities for learning this trade have opened up in the Territory.

According to the 1961 census there were 1,280 tailors, dress-makers and garment-makers out of whom as many as 1,239 were tailors. The trade is dominated by males and mainly half of them are concentrated in the urban areas. Subsequent to 1961, many development schemes were launched thus creating employment opportunities both in the public and private sectors. In 1971, their number increased to 1,613.

Domestic servants:

Housekeepers, cooks, maids and related workers engaged both by houses and institutions may be placed under this category of workers. With the increase in population, the demand for domestic servants also increases. But the establishment of many small and medium scale industries like hosiery, machine, cycle-spare parts, switches, matches, umbrella ribs, etc., provided better avenues of employment for these servants and hence there was dearth of hands for domestic service. Those in need of such services were reluctant to employ them as whole time servants. They prefer employing maid servants on a part-time basis, their wages ranging between Rs. 10 and Rs. 50 per month with or without food either part-time or whole time. If the cook or the servant maid continues to work in a house for the entire year, a piece of sari is generally presented on occasions like Deepavali or Pongal. But well-to-do families engaged wholtime servants or cooks, the latter being mostly women. The female servant-cum-cook gets Rs. 20 or more per month in addition to food and clothing. Male servants always prefer to work as butlers, cooks, bearers, waiters, etc., in big establishments in the town. Being unskilled workers these domestic servants generally get low wages when compared to other occupations.

The number of house-keepers, cooks, maids and related workers in the Territory according to the 1961 census was 3,389, out of which 2,215 almost amounting to two-thirds were found concentrated in urban areas. The 1971 census registered 75 house keepers, matrons and stewards (both domestic and institutional) 2,148 cooks, waiters, bartenders and related workers (both domestic and institutional) and 1,006 maids and related house keeping service workers, not elsewhere counted.

REFERENCES :

1. Census of India 1961, Vol. XXV Pondicherry State, Part 11-A & B, General Population Tables and General Economic Tables, *ad passim*.
2. Census of India 1971, Series 29-Pondicherry-Part II, A, B, C & D, *ad passim*.



CHAPTER—IX

ECONOMIC TRENDS

I. Livelihood pattern

It was seen in the previous Chapter that while the working population in the Territory increased from 1,38,370 in 1961 to 1,41,025 in 1971, in terms of percentage the working population had declined from 37.49 per cent in 1961 to 29.90 per cent in 1971.

Details of the region-wise percentage of male and female workers are given below :

Area	Percentage of workers to total population.		Males		Females	
	1961	1971	1961	1971	1961	1971
Union Territory ..	37.5	29.90	51.1	48.65	21.1	10.94
Pondicherry	38.9	30.73	56.2	48.98	21.3	11.92
Karaikal	36.0	29.10	54.7	49.68	18.3	8.98
Mahe	25.0	21.13	41.4	38.41	11.0	6.36
Yanam	39.8	29.95	56.3	51.39	23.7	9.01

Pondicherry region has the highest percentage of workers and Mahe the lowest. It may also be noticed that the percentage of male and female workers had declined in the Territory between 1961 and 1971. The decline in the percentage of female workers is more sharp in all the four regions. In general, half of the male population and one-fifth of the female population in the Territory are workers. Mahe stands out as an exception to this general trend as only 38.41 per cent of the males and 6.36 per cent of the females are workers.

The very low proportion of female workers in Mahe may be attributed to the absence of agricultural activities there. The general decline in the percentage of female workers may be due to a change in the definition of 'workers'. In fact, the definition of 'worker' adopted for the 1961 census tended to be very liberal in that it included a large number of persons who, though employed, were not engaged in work that effectively contributed to the normal income.*

The following table gives the percentage of workers out of the total population engaged in the agricultural and non-agricultural sectors:

			1961			1971		
			Agri-cultural workers	Non-Agri-cultural workers	Total	Agri-cultural workers	Non-Agri-cultural workers	Total
Union Territory	..		16.5	21.0	37.5	13.4	16.5	29.9
Pondicherry	..	..	17.4	21.5	38.9	13.9	16.9	30.8
Karaikal	..	..	17.8	18.2	36.0	14.5	14.6	29.1
Mahe	..	..	2.2	22.8	25.0	2.2	18.9	21.1
Yanam	..	..	8.5	31.3	39.8	13.4	16.6	30.0

* A worker has been defined as a person who has some regular work for more than an hour per day throughout the greater part of the working season, if he is engaged in seasonal occupation like cultivation, livestock, and household industry. The term included not only actual manual labourers, but also effective supervision and direction. Workers are classified into nine categories based on the nature of the work concerned. This consists of two categories in the agricultural sector viz., (i) cultivator and (ii) agricultural labour and seven categories in the non-agricultural sector viz., those engaged in (iii) mining and quarrying, (iv) household industry, (v) manufacturing other than household industry, (vi) construction, (vii) trade and commerce, (viii) transport, storage and communications, (ix) other services.

It will also be noticed that the percentage of workers, i.e., those engaged in the agricultural sector as well as in the non-agricultural sector has declined in all the regions. The difference between agricultural and non-agricultural workers is the sharpest in Mahe region where only 2.2 per cent are engaged in the agricultural sector while nearly nine times their number are engaged in the non-agricultural sector.

The percentage of working population in the Territory (in 1961) was found to be much less than in the neighbouring States of Tamil Nadu and Andhra Pradesh, but slightly higher than that of Kerala. The percentage of population depending on non-agricultural sectors was higher in this Territory than in Andhra Pradesh, Kerala and Tamil Nadu. While 35 per cent of South Arcot's population are engaged in activities connected with the agricultural sector, only 17 per cent of the population in Pondicherry region are engaged in this sector.

The working population in the Territory may further be distributed under nine industrial categories as given below on the basis of the census data of 1961 and 1971 :

Sl. No.	Categories	1961	1971
1	Cultivators ..	22,054 (15.94%)	16,709 (11.85%)
2	Agricultural labourers ..	38,807 (28.05%)	46,275 (32.81%)
3	Mining, quarrying livestock, forestry, fisheries ..	7,678 (5.55%)	7,477 (5.30%)
4	Household industry ..	7,506 (5.42%)	2,525 (1.79%)
5	Manufacturing other than household industry ..	17,317 (12.52%)	22,718 (16.11%)
6	Construction ..	3,659 (2.64%)	4,457 (3.16%)
7	Trade and commerce ..	13,352 (9.65%)	19,592 (11.05%)
8	Transport, storage and communication ..	3,279 (2.37%)	3,575 (2.54%)
9	Other services ..	24,718 (17.86%)	21,697 (15.39%)

It will be evident from the above statement that the livelihood pattern in this Territory is quite diversified. About 12.52 per cent of the working population were engaged in non-household manufacturing industries in 1961.

This increased to 16.11 per cent in 1971. The large percentage of employment in industries is partially due to the well established cotton textile and sugar mills in the Territory. There is a sharp decline in the number of workers engaged in household industry between 1961 and 1971, reflecting a decline in the household industries in the Territory.

The number of workers in the manufacturing industry, construction, trade and commerce, transport and communication registered increase between 1961-71. Employment in 'Other Services' is large because of the relatively larger number of personnel required to man the administrative services of the Territory. However, the percentage of workers in the services has registered a slight decline during the same period. Owing to the long coast-line, fishing is also well developed. This accounts for the large fishing population. The number of workers engaged in livestock and fisheries has, however, remained more or less steady during the period.

Income :

The first serious attempt to compute the Territory's income was made by the National Council for Applied Economic Research which itself was hindered in its work by lack of necessary data. Nevertheless some quick estimate of the Territory's income on the basis of the data available from the various sources was attempted. According to the Council, the per capita income of the Territory was estimated at Rs. 330.4 in 1960-61 which was nearly the same as that of Tamil Nadu (Rs. 334). The Council, however, averred that the standard of living of the people here was low although the per capita income of the Territory was on par with Tamil Nadu and all India.

The economy of the Territory is well diversified and does not depend heavily on agriculture like many other States in the country. Summarising its findings, the National Council for Applied Economic Research stated that "one-third of the Territory's total income is accounted for by agriculture including animal husbandry and fisheries. A little less than four per cent is derived from fishery activities which indicate the importance of this sector in the State. However, the productivity of the primary sector is low which is reflected in the fact that this sector with about half of the total working force in the State produces only one-third of the output. Such a low productivity is mainly due to small land holdings, low inputs in agriculture and the defective land tenurial system".¹

There is no precise information regarding the industrial income over a period of years. A little over one-fourth of the State's income originates in the industry sector, mostly of the modern manufacturing type. In 1961-62 the income from industry in Pondicherry was said to be of the order of Rs. 3 crores which constituted about 25 per cent of the total income of the Territory.² The main industries are cotton textiles, sugar, vegetable oils, matches and country spirits. Since most of these industries are of the processing type, their spread effects on the economy are said to be rather limited. It is to be noted that the major industrial output arises in the non-household industrial sector. The Council estimated the output of the non-household industrial sector at Rs. 290 lakhs, which amounted to 95 per cent of the total industrial output.³ Figures are not available to estimate the rate of growth of output of industry.

Trade, transport and services account for nearly 40 per cent of the Territory's income. The services sector in Pondicherry contributes a slightly higher income, because a large number of persons formerly employed under the French regime, are now getting pensions. Also since there is a full-fledged administrative machinery, the services engaged relatively more people in spite of the small size of the Territory.⁴

The overall economy was expected to grow by about 10 per cent over the 10 year period 1966-76. It was pointed out that this could be achieved by a 13 per cent growth rate in the secondary sector and a 6.2 per cent growth rate in the primary sector. In absolute terms, the total output which stood at about Rs. 12 crores in 1960-61 and which was likely to reach the level of Rs. 13.70 crores by the end of the Third Five Year Plan period was expected to touch Rs. 35 crores by 1976. Consequently the per capita income which stood at Rs. 320 in 1961 was expected to rise to Rs. 790 by 1976. This is expected to be substantially higher than the figure of Rs. 530 reckoned for all-India.

Another significant aspect to be noted is that the overall participation rate (37 per cent) is lower in this Territory as compared to Tamil Nadu (46 per cent). This is said to be due to a very low female participation rate which is 20 per cent while it is 31 per cent in Tamil Nadu. The basic cause of this is the relatively higher pressure of population of the Territory. The Council pointed out that since the male population itself is enough to cope with the

work load needed to run the economy at its existing level very few female workers are required to participate in the economic activity.⁵ Despite such a low participation rate, the net sown area in Pondicherry per agriculture worker was only 0.63 hectare while the figure for Tamil Nadu was 0.64 hectare.

The heavy pressure of population and low participation rate together indicate a large volume of unemployment in the Territory. Due to lack of land reforms there is undue exploitation of the tenants and very little earning accrues to the actual cultivator. The pattern of distribution of holdings is also quite uneven, being responsible for a poor standard of living.

The standard of living of the people would depend not only on the incomes they derive but also on the composition of the families they support. Non-workers depending on others for their livelihood constitute about 62.5 per cent of the total population of the Territory. Even among the workers about 45 per cent rely on agriculture. The National Council for Applied Economic Research further points out that "to the extent emigration of workers taken place in the Territory, the per capita income will also be reduced."

As neither a family budget survey has been conducted nor the cost of living index worked out in the Territory, it is difficult to enter into a more detailed discussion on the subjects of income and standard of living.

Prices :

Except for some stray information, precise data regarding the level of prices and wages during the French regime and later are not available to enter into a purposeful study of the price trends in the Territory. Prices of essential commodities, which were in short supply and for which the Territory was dependent on British India were generally higher here than elsewhere in India.

Nevertheless, an inkling of the price trend could be had from stray references. Julien Vinson pointed out that there was a steep rise in the prices of many commodities in the course of 1880's. An ox sold for 17.50 francs approximately in 1867 was sold for double this price in 1883. About 15 to 20 measures* of paddy was available for a **fanon** and six to eight measures of rice per **fanon** in Karaikal. In 1883 however, a **fanon** fetched only six to seven measures of paddy and two to three measures of rice. A rupee (2.50 francs)

* One measure was equivalent to 0.75 litre and weighed about 800 grams.

fetches 3.125 kg. of coconut oil. Even salt which was available for Rs.190 per garce (52 hecto litres) was sold at Rs. 333.6 Thus between the sixties and the eighties of the XIX century there was a sharp increase in the price of essential commodities.

Except for such scattered references, no other reliable data have been met with for the period before 1958. The Bureau of Statistics and Evaluation, which came into existence in September 1957, started collecting particulars on prices and wages from 1958-59 onwards. The following statement gives the wholesale prices of twenty important commodities in Pondicherry during the period 1959-60 to 1974-75 :

Wholesale prices in Pondicherry

Sl. No.	Commodity	1959-60	1963-64	1965-66	1967-68	1968-69	1969-70
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Boiled rice ..	59.76	63.18	67.74	88.40	—	136.51
2	Raw rice ..	76.53	74.31	N.S.	N.S.	—	145.94
3	Blackgram ..	55.16	70.67	80.01	155.80	119.20	110.57
4	Sugar ..	113.72	114.79	125.85	161.31	323.56	206.18
5	Chillies ..	264.92	251.29	296.85	326.68	215.02	593.01
6	Tamarind ..	144.00	108.13	194.83	354.88	190.46	206.46
7	Garlic ..	95.13	116.44	87.81	279.83	96.90	130.21
8	Pepper ..	385.27	404.17	502.29	496.67	485.54	698.79
9	Coriander ..	139.93	93.17	233.79	181.69	158.44	206.21
10	Cummin seeds ..	N.C.	418.75	436.92	612.79	644.71	593.96
11	Salt ..	N.C.	4.45	3.08	5.30	4.24	4.43
12	Coconut per 1000 ..	172.85	229.98	377.85	416.98	338.52	460.52
13	Mustard ..	82.58	115.98	169.88	205.15	178.21	186.46
14	Ground-nut oil ..	159.41	161.90	295.16	340.81	319.47	452.57
15	Gingelly oil ..	187.37	185.40	345.72	403.35	365.53	500.98
16	Coconut oil ..	232.17	288.32	487.17	541.26	488.47	567.81
17	Potatoes ..	42.04	47.47	59.44	76.76	59.22	74.08
18	Onions ..	23.44	30.67	30.16	37.57	49.22	50.25
19	Kerosene oil (18.5 litres)	5.25	7.97	8.58	9.04	9.32	10.06
20	Matches 50's ..	N.C.	36.00	38.68	39.50	39.33	39.25

Sl. No.	Commodity	1970-71	1971-72	1972-73	1973-74	1974-75
(1)	(2)	(9)	(10)	(11)	(12)	(13)
1	Boiled rice	119.69	129.10	133.05	144.65	278.64
2	Raw rice	128.70	138.36	142.32	149.87	252.23
3	Blackgram	116.86	175.65	221.25	195.61	197.66
4	Sugar	174.12	209.98	328.38	363.79	449.05
5	Chillies	481.35	337.83	307.13	497.02	691.35
6	Tamarind	227.29	202.67	187.92	353.50	418.02
7	Garlic	194.92	139.13	100.00	325.29	455.21
8	Pepper	877.63	848.04	728.13	926.67	1,375.04
9	Coriander	288.63	261.29	198.65	262.63	341.65
10	Cummin seeds	488.88	386.88	569.79	894.83	1,387.00
11	Salt	6.10	7.54	5.60	4.46	9.37
12	Coconut per 1000	561.98	367.50	467.71	681.46	724.58
13	Mustard	213.38	208.69	231.38	295.38	391.42
14	Ground-nut oil	500.98	567.81	487.02	767.26	802.52
15	Gingelly oil	501.41	455.82	582.49	785.06	851.72
16	Coconut oil	739.44	587.55	604.81	1,030.77	1,165.15
17	Potatoes	77.21	76.60	94.15	96.96	99.39
18	Onions	43.19	44.27	55.19	77.03	64.83
19	Kerosene oil (18.5 litres)	10.39	11.15	11.69	14.12	19.90
20	Matches 50's	39.75	40.02	40.25	45.88	61.08

N.S. = No stock.

N.C. = Not collected.

Wholesale prices are in rupees per quintal except where otherwise stated.

A close study of the above statement would reveal that the prices of all essential articles of consumption remained almost steady with slight variations till the year 1963-64. After 1964, one almost witnesses an inflationary spiral, with prices soaring up to new heights year after year causing considerable hardship to the salaried and fixed income groups in the Territory. It may be noticed that in most of the cases, the prices had increased more than twofold.

Under the Scheme of Family Living Survey Among Industrial Workers, sponsored by the Labour Bureau of the Government of India, the Bureau of Statistics was entrusted with the work relating to collection of retail prices of 186 commodities. Price collections of these commodities are being made every Saturday, and the weekly price returns are regularly sent to the Labour Bureau.

The price trends of some of the important commodities are given below :

Paddy : The price of first sort paddy which stood at Rs. 39.60 per quintal in 1958-59 rose to Rs. 83.58 in 1972-73. The increase over this period was 111 per cent. The price was at the maximum level of Rs. 89.75 in 1969-70.

Boiled rice : The price of boiled rice (first sort) which stood at Rs. 56.87 per quintal in 1958-59 increased to Rs. 133.05 in 1972-73. The increase over this period was 134 per cent. The price was at the maximum level (Rs. 136.51) in 1969-70.

Blackgram : The price of blackgram was higher at Rs. 221.25 in 1972-73 as against Rs. 51.28 in 1958.

Redgram dhal : The price of redgram dhal (first sort) which stood at Rs. 73.36 in 1958-59 registered a downward trend upto 1961-62 and then increased to Rs. 240.35 in 1972-73.

Wages :

In 1847 the Administration fixed the daily wages payable to different categories of workers in the French establishments and published the rates in the *Bulletin des Actes Administratifs*.⁷ The order fixing the wages was issued by the *Chef du Service des Ponts et Chaussées*. Such orders were not only seen by the *Chef du Service Administratif* and the *Contrôleur Colonial* but also carried the approval of the *Conseil d'administration*.

In 1947 the rate of wages in the mills was 10 annas and seven pies for coolies. It was one rupee two annas and six pies for weavers per day of eight hours and for 85 yards, six annas six pies per day for boys and girls above 14 years and below 18 years and seven annas for women.

While wages in other parts of India registered some increase, the decree which fixed the wages in the French establishments did not provide for any increase here. Moreover, the minimum wages fixed by the Administration was neither honoured nor enforced by the managements. Thus while a worker was paid 10 annas and six pies in one mill, the other mills paid only nine annas. Further, the wages for Indians and Europeans were not the same. The maximum wage for an Indian worker was about one-fifth of that paid to a European.

The dearness allowance for mill workers in Pondicherry varied from one anna nine pies to three annas for each point above 100 points. But elsewhere in India where goods were sold cheaper than in Pondicherry, the dearness allowance was uniformly fixed at three annas per point.

So far as agriculture was concerned, there were constant disputes between mirasdars and agricultural labourers on the question of wages. For instance, sometime after merger a dispute arose on the question of wages to be paid for agricultural labourers engaged in harvesting operations in Kottuchcheri commune. A conference presided over by the Administrator of Karaikal and attended by the Mayor of Kottuchcheri, the Tahsildar and the Police Superintendent decided to pay 5 local measures (two and a half Madras measures) of paddy for every local *kalam* of 48 measures (24 Madras measures) of paddy harvested in addition to two extra measures (local) per day.

Taking into consideration the miserable condition of agricultural workers and the meagre wages paid to them, the Representative Assembly passed a resolution on 3 May 1961 calling upon the Chief Commissioner to fix the minimum wages to be paid to agricultural workers in the Territory. It was under such circumstances that in May 1962 the Government of Pondicherry decided to set up an Agricultural Labour Advisory Commission. This Commission consisted of the Counsellor for Agriculture, a representative each of the Indian National Trade Union Council and the State Congress and three non-official members. The Director of Agriculture functioned as its Secretary.

The Minimum Wages Act, 1948 was extended to this Territory on 1 October 1963. Under the provisions of this Act, the State Governments are empowered to bring forward legislation to fix the minimum wages of workers numbering more than one thousand under any one category. As only agricultural workers numbered more than one thousand, they attracted the provisions of the Act.

The statement below gives the daily wages of agricultural workers at Tirukkanur in Pondicherry region based on the Abstract of Statistics published by the Bureau of Statistics :

**Daily wage rates for agricultural and skilled labourers at Tirukkanur
(Pondicherry region)**

Year	Ploughmen		Sowers and trans-planters		Weeders		Reapers and harvesters		Herdsmen		Other agricultural labourers	
	M	M	W	M	W	M	W	M	C	M	W	
1958-59	..		..	..	..		..	..		..	..
1959-60	..	..	..	..	..	..	..	..	..	..	..
1960-61	1.51	1.42	0.77	1.36	0.56	1.56	1.00	0.53	0.34	1.43	0.80	
1961-62	1.72	1.42	0.80	1.50	0.73	1.50	0.70	0.57	0.43	1.57	0.74	
1962-63	1.72	1.75	0.75	1.60	0.72	1.81	1.19	0.55	0.39	1.66	0.80	
1963-64	1.82	1.71	0.82	1.64	0.82	1.65	1.06	0.64	0.57	1.62	0.82	
1964-65	2.15	1.94	0.90	1.94	0.92	1.96	1.64	0.67	0.64	2.24	0.99	
1965-66	2.23	1.92	1.15	1.63	0.92	1.91	1.64	0.66	0.62	2.37	1.28	
1966-67	2.69	2.25	1.25	1.74	1.06	2.59	2.19	0.65	0.62	2.66	1.46	
1967-68	3.48	2.47	1.42	2.48	1.35	2.88	2.45	0.83	0.89	3.14	0.96	
1968-69	2.88	3.00	1.00	3.29	1.00	2.71	2.50	1.75	1.48	3.29	1.00	
1969-70	3.88	2.97	1.20	3.10	1.19	3.62	2.74	0.54	0.87	3.13	1.37	
1970-71	3.99	3.30	1.43	3.08	1.22	3.32	2.52	0.72	0.86	3.21	1.55	
1971-72	3.83	3.51	1.77	3.14	1.76	4.04	3.17	0.89	0.89	3.34	1.86	
1972-73	3.81	3.49	1.63	3.17	1.34	3.74	2.96	0.96	0.96	4.10	2.18	
1973-74	3.50	3.93	1.50	3.56	1.47	4.08	3.63	1.40	1.40	3.87	1.59	

M = Men

W = Women

C = Children.

Consequent to the increase in the general level of prices, there has also been a rise in the rates of wages. An agricultural labourer who was paid only Rs. 1.50 per day in 1960-61 received a daily wage of about Rs. 4 in 1972-73. Similarly a carpenter or a blacksmith, who was paid Rs. 3 per day in 1960-61, would not offer his services for less than Rs. 7.50 a day in 1972-73. The daily wage of a blacksmith which was Rs. 3 in 1960-61 had increased to Rs. 6.83 in 1972-73.

The level of wages for some of the popular categories of occupation some years after merger, is available from the Area Survey Report of 1959.

The details are given below :

Occupation						Wages	
						Average daily earnings in 1959	
						Rs.P.	Rs.P.
Agricultural labourer ..						0.50 to 1.50	
Carpentry						2.00 to 3.50	
Blacksmithy						1.50 to 2.50	
Oil pressing						1.00	
Pottery						1.00 to 1.37	
Cobblery and leather works ..						1.00 to 2.75	
Engineering works						1.50 to 2.50	
Handloom weaving						0.75	
Mat weaving						0 50	
Rope making						1.50	
Basket making						50.0 to 1.00	

The level of wages of skilled workers such as carpenters and blacksmiths between 1960-61 and 1972-73 will be evident from the following statement :

Year	Wages	
	Carpenters	Blacksmiths
	Rs.P.	Rs.P.
1960-61	2.97	3.00
1961-62	2.93	3.17
1962-63	3.69	3.50
1963-64	3.90	3.66
1964-65	4.32	4.18
1965-66	4.56	4.50
1966-67	5.52	—
1967-68	5.69	—
1968-69	5.85	4.67
1969-70	5.63	5.53
1970-71	5.84	5.43
1971-72	5.86	5.73
1972-73	7.54	6.83

Following the announcement of the 20-Point Programme in July 1975, the minimum rates of wages payable to various categories of farm workers were fixed by the Government with effect from 1 May 1976. In Pondicherry region, while wages for adults ranged from Rs. 3.50 to Rs. 9.00, for non-adults it ranged from Rs. 2.10 to Rs. 3.60 for ploughing, sowing, plucking of seedlings, harvesting, reaping, milking, tending cattle, bee-keeping, poultry farming, etc. While the hours of work has been fixed as five for those engaged in ploughing it was seven for other categories of workers.

In Karaikal region, the pattern of wages was different as payment was allowed in cash and kind. The rate of wages for workers engaged in hard work during non-cultivation and cultivation season were Rs. 5 and Rs. 6 respectively or 5 litres of paddy plus Rs. 2.30 or 6 litres of paddy plus Rs. 2.75 respectively. The wages of pannayals were fixed at 3 litres of paddy and 40 paise per day and 7 kalams of paddy per annum. The rates of wages for light work usually done by women for planting of paddy seedlings, threshing and harvesting were also fixed.

In Mahe, the wages ranged from Rs. 6.50 to Rs.15 respectively for eight hours light work done by women and 4 hours of ploughing with ones' own bullocks.

In Yanam, an adult engaged in ploughing, reaping and threshing was entitled to Rs. 4.75 or 7 kg. of paddy or 3.5 kg. of rice while non-adults were entitled to Rs. 2.25 or 3.5 kg. of paddy or 1.5 kg. of rice.⁸

II. General level of employment

Level of employment:

Examining the problem of employment in 1965, the National Council for Applied Economic Research maintained that it was neither meaningful nor possible to make any precise estimate of the employment or under employment situation in this extremely small territory divided into four far flung areas. Since the economy of the various settlements was dependent more on that of the adjoining areas belonging to other States, than on their existence as a separate political entity, not much meaning could be derived by giving precise numbers of the unemployed or the underemployed. Absence of the National Sample Survey data or of other surveys regarding this Territory rendered it difficult even to make rough estimates on this account. However, on the basis of available evidence, the N.C.A.E.R. came to the conclusion that the problem of unemployment as well as underemployment was quite serious in the Territory. It was considered to be more serious than in the adjoining State of Tamil Nadu. In fact the heavy pressure of population and low participation rate indicated a high level of unemployment in the Territory.

The Council further estimated that the labour force in the Territory would rise to 2,53,000 during the decade 1966-76. Of this, about 1,84,000 would constitute the working force. Out of this, nearly 51,000 may be absorbed by the secondary sector, 70,000 by the tertiary sector and the remaining 63,000 by the primary sector. Proportionately the increase would be highest in the organised industries (nearly 100 per cent). As a consequence, the employment structure was expected

to undergo a radical change. The proportion of workers in the secondary sector, where the per worker productivity is relatively high was expected to increase from 21 per cent in 1960-61 to 28 per cent in 1975-76. Employment in the primary sector was expected to fall from 49 per cent in 1965-66 to 34 per cent in 1975-76. It was pointed out that even in absolute terms, there would be a fall (from 72,000 in 1965-66 to 63,000 in 1975-76) in employment in the primary sector. ⁹

The above computation was based on the assumption of a closed economy. The Council further pointed out, that there was bound to be immigration of skilled as well as unskilled personnel from the neighbouring areas and the total working force would be much higher than that based on just the population growth. Employment in the primary sector was not expected to fall as visualised above. The Council averred that the agricultural operations will be more intensive in the coming years which should vastly reduce the underemployment problem. The Council did not visualise any large scale reduction in employment as it felt that the operations will continue to be largely manual. What was required in this Territory was an attempt to promote a more efficient use of labour as measured by productivity per workers. A relatively larger investment in industries and an intensive development of agriculture, was suggested as means to achieve the above objective. The various measures, legislative and developmental, recommended for the modernisation of agriculture was expected not only to increase farm income but also help in reducing the unemployment in the Territory.

No useful study of the supply position of different categories of workers seems to have been undertaken so far in this Territory. The Area Survey Report of 1959 pointed out that there was a desire on the part of many labourers in the weaving industry to switch over to some other occupation due to very poor wages.¹⁰ The report also referred to the dearth of skilled workers in many branches of household industries. Some rough idea of the supply position of skilled workers and professionals may be had from registrations in the Employment Exchange. Shortage of the following types of workers was reported from the Pondicherry Employment Exchange in 1973 :

1. University teachers in Medicine and Surgery
2. Dark Room Assistants (Diploma holders)
3. Laboratory Technicians
4. X-Ray Technicians
5. Public Health Nurses
6. Music Teachers (S.S.L.C. passed)
7. Pharmacists
8. Veterinary Surgeons
9. Dental Surgeons

Employment Exchange :

The Pondicherry Employment Exchange, which began its operations on 13 February 1957, was started with a view to providing employment opportunities for job seekers, and to enabling the educated unemployed and underemployed and even unskilled workers to register themselves. However, the Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 was extended to this Territory only from 1 October 1963.

An Employment Information and Assistance Bureau was established in Karaikal on 23 October 1968 with an Employment Information Assistant to serve the needs of Karaikal region. Employment seekers from Mahe and Yanam applied for registration through post in the prescribed forms which were made available by the Administrator's Offices. The Employment Information Assistant of Pondicherry visited these regions once every three months to help fresh employment seekers register their names and registered employment seekers renew their registrations.

The Employment Market Information Unit was set up in Pondicherry on 19 December 1959 under the care of a Junior Employment Officer. This Unit collects quarterly and biennial data of employees working both under private and public sector. The Vocational Guidance Unit was set up on 22 November 1967 and placed under the care of another Junior Employment Officer.

Details of registration, placements and number in the live register of the Employment Exchange between 1968 and 1972 are furnished below :

Year	Registration	Placements	No. on live register at the end of each year
1968	8,238	563	8,561
1969	8,386	510	7,672
1970	7,217	539	8,143
1971	6,541	346	9,403
1972	9,824	434	13,518
Total	40,206	2,392	47,297

According to the above statement 40,206 persons had registered themselves with the Employment Exchange. Out of them 2,392 persons were placed on jobs by the Exchange. In term of percentage this works out to 5.9 per cent in five years.

Another significant fact to be noted is that although the number of registrations per annum runs to several thousands, the increase in the number of candidates is only marginal, and has shown a decline between 1969 and 1971. The reason is that, quite a large number of candidates who seek registration are not natives of Pondicherry but come either from the neighbouring districts of Tamil Nadu, Kerala, etc. Moreover, a good percentage of these candidates do not take the trouble of renewing their registration. All told, the figures of the Employment Exchange cannot be taken as a correct index to measure the extent or intensity of unemployment in any particular region.

The distribution of employment seekers according to educational qualifications as on 31 December 1972 is shown below :

Sl. No.	Educational level	Males	Females	Total
1	Below Middle School Standard (including illiterates)	4,109	1,035	5,144
2	Middle School Standard	3,788	477	4,265
3	Matriculates	1,606	260	1,866
4	Higher Secondary/undergraduates	1,013	223	1,236
5	Graduates :			
	(1) Arts	307	52	359
	(2) Science	136	39	175
	(3) Commerce	51	4	55
	(4) Engg. Technology	48	8	56
	(5) Medicine	28	8	36
	(6) Veterinary	—	—	—
	(7) Agriculture	10	—	10
	(8) Law	3	—	3
	(9) Education	110	57	167
	(10) Others	—	—	—
6	Post-Graduates :			
	(1) Arts	69	15	84
	(2) Science	41	4	45
	(3) Commerce	17	—	17
	(4) Engg. Technology	—	—	—
	Total	11,336	2,182	13,518

The occupational break-up of the cumulative total of employment seekers in the live register of the Employment Exchange as on 31 December 1970, 71 and 72 is given in the following table :

Divisions	1970		1971		1972	
	Men	Women	Men	Women	Men	Women
1. Professional, technical and related workers.	301	218	435	262	594	329
2. Administrative, executive and managerial workers.	2	—	2	—	8	—
3. Clerical and related workers.	51	19	216	52	303	61
4. Farmers, fishermen, hunters, loggers and related workers.	30	—	45	—	51	—
5. Sales workers	—	—	—	—	—	—
6. Miners, quarrymen and related workers.	2	—	2	—	2	—
7. Workers in transport and communication and allied occupations.	199	5	452	5	304	3
8. Craftsmen, production process workers and labourers not elsewhere classified.	364	7	352	3	687	6
9. Service, sport and recreation workers.	57	18	146	57	260	58
10. Workers not classifiable by occupation.	5,595	1,273	6,631	743	9,127	1,725
Total	6,601	1,542	8,281	1,122	11,336	2,182

Whenever suitable candidates are not available in the Pondicherry Exchange against any particular vacancy, details of vacancies are circulated to the Professional Executive Employment Office, Madras, University Employment Information and Guidance Bureau, Madras, Madurai, Annamalai Nagar and other District Employment Exchanges of Tamil Nadu for submission of suitable candidates. Selections are made from the candidates sponsored by these Exchanges.

III. Planning and Community Development

Planning:

The concept of planning, as well as investment for development, outside the realm of normal budget is not altogether new as far as this Territory is concerned. A plan of action which came to be known as '**Programme de grandé travaux pour le Développement de l'Outillage économique et Social**' prepared by Girod, **Chef du Service des Travaux Publics**, was launched in the thirties of this century in an attempt to strengthen the economic infrastructure of the French establishments.

Again, in an attempt to revamp the economy affected by World War II, a programme for the socio-economic development of the French establishments in India financed by "**Le Fonds d'Investissement pour le Développement Economique et Social**", popularly known as FIDES, was launched in the year 1948. A sum of 250 million francs was provided under FIDES for all the French Overseas Territories.

The programme as conceived then covered rural electrification, irrigation, water supply, town planning, construction of an aerodrome, education and public health. The implementation of all the schemes, was estimated to cost around Rs. 130 lakhs. The agricultural and industrial sectors did not receive much attention, apparently because the plan was drawn up by Girod who was an engineer and not an economist.¹¹

The items of work proposed to be carried out during 1948-49 included the setting up of a power house of 5,000 K.W. capacity, development of the pier, construction of dispensaries at Nettappakkam, Villiyanur and Ambagarattur, construction of 12 schools in Pondicherry, seven in Karaikal, extension of water supply for Villiyanur and Tuttippattu, erection of a new pumping station at Nellitoppu, laying of new roads in Laspettai and Bahur, improvement of roads in Karaikal, radio communication between the establishments and the French Union. All these works were tentatively estimated to cost Rs. 70 lakhs. A substantial part of this expenditure was to be met by France. However, on 17 September 1949 the Governor observed in his address to the Representative Assembly that the major items of work could not be executed due to lack of skilled personnel and materials and that only maintenance works could be attended to. Presumably the power house might be the only major work taken up under this programme.¹²

During 1949-50 the construction work of schools at Pakkamudiyampet, Karkilambakkam, Kattukkuppam, Madukkarai and Kariyamanikkam was completed. In all 3.5 km. of new roads were laid and about 18 km. of roads improved. Some improvements were also carried out in the pier.

The programme for 1950-51 included the desilting of Oussudu Eri, modernisation of the sluices, extension of electricity to Mahe and Yanam, improvement of road net-works, construction and extension of hospitals, modernisation of the Maternity Hospital in Pondicherry, extension or construction of school buildings. ¹³

A sum of Rs. 9,00,000 is said to have been allocated for 1951-52 to continue the construction work of schools and dispensaries, for commissioning the power house and for the development of the old pier. By 1952, the funds provided under FIDES seem to have spent fully. ¹⁴

In continuation, a new four year programme to be financed by FIDES seems to have been submitted for the technical approval of the Ministry of Overseas Affairs. The implementation which was scheduled to begin on 1 July 1952 was postponed to 1 July 1953. The programme of action included the construction of a new pier, improvements to the General Hospital, Pondicherry, erection of pumping stations for irrigation, provision of inter-regional radio communications and the establishment of a radio broadcasting station. ¹⁵ The approval for the programme of works to be implemented during 1953-54 was not received till the end of 1953, when it was time for finalising the budget for 1954. Soon followed *de facto* merger.

After *de facto* transfer, the new administration was faced with the problem of creating suitable agencies for effective implementation of the schemes included in the Five Year Plan. While the Directorates of Agriculture, Animal Husbandry, Fisheries and Industries and the Office of the Registrar of Co-operative Societies came to be organised one after another, some of the existing establishments were either expanded or strengthened to meet the needs of the Territory embarking on a new programme of development under the Indian Five Year Plans. In all, a sum of Rs. 50.30 lakhs was spent under the I plan upto 31 March 1956. A sum of Rs. 20.50 lakhs was spent for 'Social Services'. Expenditure under 'Irrigation and Power' amounted to Rs. 11.80 lakhs. A sum of Rs. 10.80 lakhs was spent under 'Transport and Communications'. While implementing the plan schemes the administration met with several hurdles and

difficulties. The Nurses' Training Centre could not be started for want of adequate technical staff. The acute shortage of trained personnel prevented the opening of more Key Village Units and Dispensaries in the Territory. It was also found difficult to secure the services of financially sound and experienced building contractors. This led to some delay in the execution of works. The land acquisition procedure was also found very cumbersome. Delay in procuring equipments through the Directorate General of Supplies and Disposals, difficulties in obtaining steel and other controlled articles and the foreign exchange problem were some of the other impediments which stood in the way of quick implementation of the schemes.

The benefit of Indian Planning having been extended to the Territory only during the last quinquennial of the First Five Year Plan, some special consideration seems to have been shown by way of larger outlay to this Territory during the Second Plan. Consequently, the Second Plan outlay amounted to Rs. 476.50 lakhs. The construction of a new pier in Pondicherry was taken up as a Central Scheme by the Ministry of Transport and Communications. In the first two years of the II Plan, expenditure amounted to Rs. 48.64 lakhs and Rs. 48.69 lakhs as against the budget estimates of Rs. 95.16 lakhs and Rs. 119.54 lakhs respectively. Hence, at the time of the mid-term appraisal, of the II Plan, the outlay of Rs. 476.50 lakhs was pruned to Rs. 414.27 lakhs. Simultaneously steps were taken to remove the bottlenecks and raise the tempo of expenditure. As a result the rate of expenditure progressively increased to Rs. 63.26 lakhs in 1958-59, Rs. 79.42 lakhs in 1959-60 and Rs. 99.22 lakhs in 1960-61. Thus the total expenditure amounted to Rs. 339.23 lakhs being 71.19 per cent of the original outlay of Rs. 476.50 lakhs. According to the N.C.A.E.R. the short fall in the plan expenditure was due to the fact that the sudden increase in outlay was rather too high, some of the laws and procedures introduced under the French regime continued to be in vogue and the shortage of technical personnel could not be made good readily.¹⁶

Pondicherry is estimated to have received proportionately higher plan outlays than other States. Thus during the two plan periods (1956-66) the per capita annual plan outlay in Pondicherry was about Rs. 26 as against Rs. 14 for Tamil Nadu. A sizable portion of the expenditure was incurred on buildings, equipment, power and water supply schemes which resulted in the creation of permanent capital assets. As much as 72 per cent of the total expenditure under the II Plan was on 'Capital assets'.

The outlay for the III Plan was raised to Rs. 1,017 lakhs as against Rs. 339 lakhs for the II Plan. Of this Rs. 692.73 lakhs was meant to be spent for State Schemes and Rs. 324 lakhs for Central Schemes (Rs. 300 lakhs meant for the Medical College and Rs. 21 lakhs for the new port and pier). Among the State Schemes, social services including general education, medical and public health accounted for half the outlay. The other half was distributed over agriculture, transport and power. In sectors like irrigation, community development and transport, outlay under the III Plan was less than in the I & II Plans.

The annual per capita outlay (State sector) under the I, II & III Plans in Pondicherry was almost double that of the All States' average and much more than that of Tamil Nadu. According to an estimate prepared by the N.C.A.E.R. the annual per capita outlays in Pondicherry, Tamil Nadu and All States' average were as follows :*

(In Rs.)						
Sectors				Pondicherry	Madras	All States' average
Agriculture & Allied services ..				4.0	4.1	5.5
Industry				1.3	1.1	0.7
Transport				3.4	0.5	1.1
Power				3.3	5.3	3.0
Social Services				12.7	3.1	3.2
Miscellaneous				1.2	0.02	0.2
Total				25.9	14.12	13.17

* While for the II Plan actual outlay has been taken, for the III Plan proposed outlay has been taken. The total outlay under the Second and Third Plans was divided by the 1961 population to arrive at the per capita outlay.

Reviewing the situation the N.C.A.E.R. commented as follows :

"Taking an overall view of the total plan expenditure, it is clear that proportionately a much larger expenditure has been incurred in this State, e.g., during the Third Five Year Plan period the annual per capita plan expenditure in Pondicherry would amount to about Rs. 55 as against Rs. 34 for all-India and Rs. 17 for Madras State. Part of the explanation for this situation is that the Central Government has assumed a special responsibility for the economic development of this State because of its peculiar political set-up and also to make up for the past neglect." 17

At the same time the N.C.A.E.R. also pointed out that the economic development of the Territory was being adversely affected by the slow speed with which the various legislative measures were being introduced in an attempt to bring this Territory on par with other States. Absence of up-to-date land records and land reforms, inadequate tax structure and the lack of statistical information on many sectors of the economy were said to hamper development planning. The development of agriculture will be hampered until measures to bring about land reforms, consolidation of holdings and land ceilings are carried out.

During the first three Five Year Plans, a good deal of emphasis was laid on the development of economic and social overheads. This strategy is said to have been adopted partly "to make up for the past leeway in these essential fields" and partly because the Territory "could not formulate plans of direct investment as such investments could not be absorbed unless the overhead facilities were created first." Another and perhaps more pertinent reason for the lower-outlays in output generating sectors of the economy was that the Territory lacked in trained personnel who could formulate plans in their technical details. This handicap persists even now, though to a lesser extent.

The larger outlays on transport, power, distribution, education and health is said to have created the necessary conditions for the economy to respond quickly to productive investments. In order to achieve this the N.C.A.E.R. suggested a new strategy. It suggested that the utmost attention should be paid to the development of commodity producing sectors of the economy viz. agriculture and industry. It was further pointed out that relatively less outlays will be required for economic and social services. While suggesting to maintain the pace for progress set in for education and public health, it called for the consolidation and expansion of transport and power facilities to keep pace with agricultural and industrial expansions. Moreover, because of high pressure of population on land, large scale unemployment and absence of any spectacular growth possibilities, the need for a bold programme for family planning was also emphasised.

Details of plan outlay and actuals under the various plans are shown in the following statement :

(Rupees in lakhs)

Plan	Outlay	Actual	Percentage of actual expenditure
	Rs.	Rs.	
I Plan ..	50.30	50.30	100 %
II Plan ..	414.27	339.23	81.9 %
III Plan ..	692.73	623.85	90 %
Annual Plans ..	658.25	554.49	84.2 %
IV Plan ..	1250.00	1436.04	114.9 %
V Plan ..	3200.00		

Upto the end of the IV Plan, a total sum of Rs. 30.04 crores was spent, while outlay under the Fifth Plan alone amounted to Rs. 32 crores. While expenditure under the II, III and Annual Plans was less than the plan outlay, expenditure under the IV Plan was more than the plan outlay by 14.9 per cent.

Here it would be worthwhile to consider the pattern of investment suggested for the 1966-76 decade by the National Council for Applied Economic Research.

The N.C.A.E.R. proposed an outlay of Rs. 3,529 lakhs for the decade. Sector wise, the investment suggested under the public and private sectors was as follows :

(Rupees in lakhs)

Sector	Total investment	Percentage
Agriculture	210.50	6.0
Livestock	50.00	1.4
Fisheries	68.55	1.9
Industries	2615.00	74.1
Power	100.00	2.9
Transport	110.00	3.1
Social services	360.00	10.2
Miscellaneous	15.00	.4
Total ..	3529.05	100.00

The highlight of the N.C.A.E.R. proposal was the massive outlay of Rs. 2615.00 lakhs for the development of industries, followed by social services. In its scheme, agriculture assumed a lower priority. The Council claimed that this investment pattern would accelerate the growth rate of the economy and transform the existing structure radically. The primary sector which contributed about one third of the total output was expected to become relatively less important despite the fact that it would rise by about 80 per cent over the decade (1966-76). Its share in the total economy was expected to fall to about one-fourth by 1976. The secondary and tertiary sectors where the productivity per worker was relatively high would grow faster and would contribute nearly 36 per cent and 40 per cent respectively to the Territory's total income by 1976. Such a favourable change was envisaged mainly because of the large investments suggested in new industries.

A part of this investment was suggested for the expansion of the sugar and textile industries and for new capacities in agro-industries. But the major investment was for engineering industries. The Council felt that an industrial programme of this dimension and type would not only give a strong forward push to the Territory's economy, but also contribute to the alleviation of the Territory's unemployment problem. The next claimant was the primary sector consisting of agriculture, livestock and fisheries. While under agriculture, long term investment was envisaged for irrigation, immediate gains were sought by the increased use of fertilisers. In fisheries, the main part of the investment was sought for mechanised boats.

The investment envisaged for 'power' and 'transport' was of the order of Rs. 210 lakhs. While the Council considered these two services essential for the growth of the commodity sectors, they were in its opinion already well developed and hence did not call for indiscriminate expansion. The recommended investment was mainly for filling up the existing gaps of these services and coordinating them with the agricultural and industrial expansion programmes. About 10.2 per cent of the total investment was suggested for social services. Technical Education and Family Planning were pinpointed as the two important items in this programme.

The III Plan period ended on 31 March 1966. Then followed a three year period of annual plans, followed thereafter by the IV Plan completed on 31 March 1974. Adding up the investment under the three Annual Plans,

the Fourth Plan and the Fifth Plan, the actual pattern of investment * for the 13 year period (1966-1979) works out as follows :

(Rupees in lakhs)

Sector	Investment	Percentage
Agriculture & Rural Development	1,135.19	22.2
Co-operation & Community Development	212.29	4.2
Irrigation & Power	594.69	11.6
Industry	282.15	5.5
Transport & Communications ..	528.32	10.3
Social Services	2,311.25	45.3
Miscellaneous	44.36	0.9
Total	5,108.25	100.0

A comparison will show that the actual pattern does not adhere to the pattern suggested by the Council.

Planning machinery : As far as 'Planning' is concerned the Chief Secretary is the Development Commissioner while the Finance Secretary looks after the subject of 'Planning' with the assistance of the Planning Cell, which deals with the formulation of the Five Year Plans, Annual Plans and carries out periodical reviews of the progress of plan execution. The Planning Cell also functions as a central coordinating agency of all the departments dealing with the execution of development schemes in the Territory. As a matter of convention the Chief Minister had been holding the "Planning" portfolio for many years.

Planning Cell : In the beginning, there was no separate wing to deal exclusively with planning in the Territory. Sometime in 1966 the Government of India recommended that planning cells should be constituted at the Secretariat level (and also in the subordinate offices) to deal with the formulation of State plans, review plan progress and coordinate planning activities of the various development departments. Accordingly in October 1966, a separate Planning Cell came into being in the Development Department.

While for Annual Plans and IV Plan the actual outlay has been taken into account, for the V Plan the proposed outlay has been taken into account.

In the wake of the reorganisation of Secretariat Departments in May, 1967 the subject 'Planning and Coordination' was transferred along with the 'Planning Cell' to the Chief Secretariat where it was dealt with until December 1967. It was then considered that it would help to achieve better coordination between planning and budget, if it were to be dealt with by the Finance Department, in line with the practice obtaining in States like Tamil Nadu and Maharashtra. Accordingly, the subject was transferred to Finance Department on 13 December 1976. The evaluation of plan schemes, collection and compilation of data regarding manpower requirements for plan schemes were the other functions of the planning cell.

A separate Directorate of Planning and Research was set up with effect from 15 October 1975 under the control of the Finance and Planning Department.

Besides providing guidance and technical support to the various Government agencies in the preparation of plan schemes, the Directorate serves on the administrative side as a link with the planning commission and keeps a watch over plan implementation. The Directorate also functions as a coordinating agency and helps remove bottle-necks hampering speedy implementation. The Director of Planning and Research has been conferred with the ex-officio Deputy Secretary status to deal with administrative matters.

The State level Coordination Committee : The Co-ordination Committee, consisting of the Chief Secretary (Chairman), Secretaries to Government and Heads of Departments connected with plan schemes, reviews periodically the progress made in the execution of plan schemes and suggest ways and means for removing the bottle-necks which hamper their smooth implementation. Similar Committees exist in the outlying regions of Karaikal, Mahe and Yanam as well, consisting of the respective Administrators and the local officers dealing with various schemes.

The Planning Board : The State Planning Board, headed by the Lt. Governor advised the Government on matters relating to the formulation and implementation of plan programmes. All Secretaries to Government and leading members of the public, representing different walks of life were its members. The Administrative Reforms Commission, however, recommended its reconstitution. The Board, which was accordingly reconstituted in 1968, was a small compact body consisting of the Lt. Governor (Chairman), the Chief Secretary

(Vice-Chairman), other Secretaries (official members) and 8 non-official members drawn from various regions and political parties. The Board was again re-constituted in 1972 giving representation to M.P.s, all M.L.A.s and Mayors. There are Regional Planning Committees for all the four regions of the Territory represented by a cross section of the community i.e., Mayors (now Chairmen), M.L.A.s, agriculturists, industrialists, social workers, representatives of trade, industry, commerce, etc.

Plan formulation : The tentative plans relating to various sectors of development are formulated by the concerned departments and then discussed at a series of meetings of Working Groups, consisting of the Chief Secretary (Chairman), the Secretary in-charge of the Department concerned, the Heads of Department concerned and a few non-officials. In the light of the deliberations and recommendations of the Working Groups, the Departments work out their detailed proposals. While formulating the schemes, suggestions and recommendations made by the State Planning Board and the Regional Planning Committees are also taken into account. The proposals are, thereafter, scrutinised and processed in the Finance (Planning) Department with reference to the broad guidelines communicated by the Planning Commission. After obtaining the approval of the concerned Minister, the Chief Minister and the Lt. Governor, the proposals are incorporated in the draft plan. Once the draft plan is approved by the Cabinet and the Legislature, it is forwarded to the Planning Commission and the concerned Ministries of the Government of India.

The Annual Plans are drawn up for each financial year, taking into account the directives of the Planning Commission and the phased allocation of the Five Year Plan outlay. The Annual Plan, after it is approved by the Cabinet, is sent to the Planning Commission where it is discussed in the Working Groups consisting of the representatives of the Ministries, the Planning Commission and the Local Administration. The Programme Advisor of the Planning Commission prepares his own report based on the recommendation of the working groups which is discussed finally by the Deputy Chairman, Planning Commission, with the Chief Minister of the Territory. Only then is the final allocation for the Annual Plan decided upon. The plan budget is finalised by the Ministry on the basis of the approved Annual Plan outlay.

Examining the problem of plan formulation, the N.C.A.E.R. advised that a number of schemes such as drainage, flood control and anti-sea erosion schemes will have to be technically examined before they are incorporated in

the plans. Similarly, it suggested that basic data relating to underground water resources and the nature of waste land for reclamation purpose should be collected and surveys undertaken before actual schemes are formulated. The Council also stressed the need to pass legislation speedily for land reforms and for consolidation of holdings as the programming of the cropping pattern irrigation and other measures would depend on such legislation. On some of these basic requirements, advance action should be taken in the last year of the Third Plan period itself and in the early years of the Fourth Plan period. The Council pointed out that only then the Government will be in a position to formulate the various schemes in detail and phase their execution properly for the Territory as a whole and for the various regions in detail.¹⁸

Plan Evaluation : There is no independent Evaluation Cell or Unit to carry out plan evaluation. An Evaluation Unit was formed in March 1974 in the Directorate of Statistics. This Unit carries out evaluation studies of certain scheme as decided upon by the Finance Department from time to time.

Pilot Research Project in Growth Centres : In an attempt to implement the 'growth centre strategy' the Planning Commission decided to set up twenty Pilot Research Projects in Growth Centres during the IV Plan. One such project was allotted to Pondicherry in order to identify the existing and potential growth centres, formulate plans for development of the spatial area served by the Growth Centres and ultimately evolve a research methodology for district planning in the country. The Pilot Research Project was set up on 15 September 1971. The Project which functioned as a Centrally Sponsored Scheme till 31 March 1974, is now operated under the Territory's plan.

Financial outlook : According to the peculiar budgetary system for Union territories, the revenue gap i.e., the excess of revenue expenditure over revenue receipts is met by way of grant-in-aid from the Home Ministry. This is done because the total revenue receipts are less than the total revenue expenditure. The Territory's revenue resources are insufficient to meet even the non-plan expenditure. The aggregate capital expenditure including loans is, therefore, defrayed by means of Central loan. The entire plan expenditure is covered by loans and grants from the Centre. The Union Territories neither have borrowing powers nor public account or independent cash balances of their own. It is found imperative to raise additional taxes or reduce its non-plan commitments. Only to the extent these two objectives are fulfilled, allocation of resources for larger plans becomes possible.

In 1970, the Government of India decided to allow the entire amount of additional resources mobilised by the Administration for augmenting plan outlay subject to the condition that all increases in non-plan expenditure would be charged first. While assessing the increase in non-plan expenditure, a growth rate of 4 per cent was to be deducted, besides any increase in non-plan expenditure resulting directly out of the decision of the Central Government. It was assured that this benefit would be made available on a cumulative basis i.e., apart from the additional resources mobilised in any particular year, the yield during that year as a result of measures taken during the previous year will also be regarded as additional resources which will be made available for plan outlay. The Administration was granted an increase of Rs. 62.48 lakhs in plan allocation during 1972-73 and Rs. 125.00 lakhs for 1973-74 on account of additional resources mobilised.

For the years 1974-75 and 1975-76, the Government of India gave a credit of Rs. 145 lakhs for the enhancement of the plan outlays based on the additional resources mobilised by the Administration.

Problems of Development : Examining the problem of development, the N.C.A.E.R. averred that the development of Pondicherry was greatly conditioned, favourably and unfavourably, by its small size. The favourable influence seems to have arisen from the fact that it received a greater share in the national plan outlay and that a closer attention could be paid to the problems because of the officers having a personal knowledge about the local situation. A substantial part of the development of transport, power and health facilities in the State during the course of the last five years (i.e. prior to 1965) was mainly due to these advantages. However, the unfavourable influence of the size of the territory was said to outweigh its favourable influence. First, the scattered nature of the regions created unnecessary strain on the administrative and financial resources of the territory. Moreover, their development was said to be dependent more on the adjoining territories. According to the Council, the Territory could not afford to have all the necessary technical personnel for planning and for implementing the various development programmes. In the case of the Pondicherry region, its small size and the fact that it was not a contiguous area was said to adversely affect the transport and communication sector and also the supervision and implementation of the development plans in the area.

The N.C.A.E.R. therefore suggested that some minor adjustments could be made with the neighbouring State of Tamil Nadu, to make Pondicherry region a contiguous one. The Council pointed out that such a step would greatly facilitate the implementation of schemes such as soil conservation, minor irrigation, consolidation of holdings, livestock improvement, repair and maintenance of roads, etc., and help improve the economic viability of the Territory, avoid wastage in the implementation of several measures of development and ensure a closer political administration and economic alignment of the different territories with their neighbouring regions.

Another significant development in the realm of planning was the identification of growth centres in Pondicherry region by the Directorate of Pilot Research Project. The Directorate collected detailed socio-economic data and determined the locational specification of all facilities and services in the study area. The data thus collected was analysed and plans for specific services were prepared.¹⁹ As a result of the study carried out, the Directorate identified five Semi-urban Centres, nine Rural Growth Centres and 15 Rural Service Centres in Pondicherry region.²⁰ The report pointed out that the practical utility of these tentative proposals would be realised only if the Functional Departments treated with due seriousness the area demarcation arrived at and adopted the 'unit areas' as the base for formulating the development programmes taking into account the needs of the people. This, it was pointed out, would facilitate the emergence of an integrated approach to planning in the Territory.

Community Development :

The Community Development Programme was launched in this Territory with the inauguration of the Pondicherry Block on 5 May 1955, only a few months after merger.

The Community Development Programme was first placed under the care of the Secretary (Development) functioning as Development Commissioner who was assisted in his task by an Assistant Development Officer. The Block Development Committees consisting of officials and non-officials functioned as advisory bodies.

The Administrative set-up of the blocks in the Territory was slightly different from the national pattern followed by the other States. The blocks did not have a Liaison Officer such as a District Development Officer or District Collector, to liaise between the B.D.O. and the State Level Developmen

Authority. Another aspect to be noted was the absence of the Panchayat set-up in the Territory. Hence programmes relating to the development of agriculture, animal husbandry, etc., could not be entrusted to the Panchayat Unions for implementation. Moreover, in the absence of Panchayats, the blocks were hampered in their task of mobilising the peoples contributions. In other States, this contribution was very often made by the Panchayats themselves. This exigency had to be met with the help of ad hoc Village Development Committees. However, according to the Progress Report of the Second Five Year Plan, the Community Development Programme in the Territory seems to have been "carried out with marked success thanks to the enthusiastic response from the public". Encouraged by the success achieved, the original II Plan outlay of Rs. 12.50 lakhs was enhanced to Rs. 29.43 lakhs at the time of the reappraisal of the plan and the actual expenditure amounted to Rs. 30.73 lakhs.

With the inauguration of the Yanam Block on 5 May 1963 about 99.5 per cent of the total area of the Territory (exclusive of Pondicherry town) and 89 per cent of the total population was covered by the Community Development Programme.

Pondicherry region consisted of one double block ; the entire Karaikal region comprised one single block ; Mahe region was made up of half-a-block and Yanam one-third of a block . As on 1 April 1974 the four Community Development Blocks in the Territory were in the stages as noted below :

1. Pondicherry Double Block	Post Stage II Block Ninth year	Inaugurated on 5-5-1955
2. Karaikal Single Block	Post Stage II Block Eighth year	Inaugurated on 2-10-1956
3. Mahe Half-a-block	Post Stage II Block Fourth year	Inaugurated on 1-4-1959
4. Yanam One-third Block	Stage II First year	Inaugurated on 5 5 1963

Under the auspices of the Community Development Blocks the Village Volunteer Force Scheme was inaugurated on 26 January 1963. As on 31 March 1966 as many as 8724 were enrolled as members.

The Applied Nutrition Programme, the Crash Programme for Rural Employment, the Model Village Scheme and the Village Housing Project were some of the important schemes implemented under the auspices of the Blocks. In Pondicherry, the Nutrition Programme was put into operation in Villiyanur Ariyankuppam and Ozhukarai Communes. In Karaikal, it was in operation in Kottucherry and Tirunallar Communes.

The Estimates Committee which studied the working of the Community Development Project in 1970 deprecated the decline in the net area under crops in the block and called for measures to remedy the situation. The Committee also called upon the Government to fix the minimum physical targets in the field of agricultural improvement to be achieved by each one of the blocks within a year and to outline the responsibilities of each of the officials of the block. The Committee wanted financial assistance to be extended for setting up model cattle-sheds in all the blocks and recommended the supply of First Aid Boxes for WLW's.

The Estimates Committee also draw attention to the fact that schemes under 'Minor Irrigation' were being implemented both by the Public Works Department and the Block. In order to avoid defects of this dual responsibility, the Committee wanted the functions of both to be judiciously defined. The maintenance of all civil works like well, tanks and embankment was the responsibility of the concerned Municipalities. But it was found that many of the wells so constructed were not properly maintained. The Committee also suggested that the performance of the blocks should be subjected to an evaluation study.²¹

Villiyanur Block :

The Villiyanur National Extension Scheme was inaugurated on 5 May 1955 and placed under the administrative control of the Project Executive Officer. In view of the very large area covered, it was conceived as a double block, forming a single administrative unit covering as many as 97 (Revenue) villages and a population of 2,27,000.^{22 *}

It was converted into a Community Development Block with effect from 2 October 1957, six months ahead of the usual three year period and came to be treated as a Stage-I Block under the modified Community Development Programme. It entered Stage-II on 2 October 1960 and the Post Stage-II, Five Years hence i.e., on 2 October 1965.

* According to the Estimates Committee Report 1970-71, Eleventh Report on Community Development Project (1971) and the Evaluation Report (No. 6) it covered 267 villages and a population of 2,18,140.

A site was donated by the Trustees of the Mariamman Temple and the Villiyanur Municipality for putting up the block office and staff quarters. New buildings for the office and staff quarters were declared open on 11 August 1960.

Being a double block the schematic budget provision for the Stage-I was Rs. 24.00 lakhs, which was entirely spent ; under Stage-II an expenditure of Rs. 7.40 lakhs was incurred. During the few months of its existence in Post Stage-II i.e., from 2 October 1965 to 31 March 1966, an expenditure of Rs. 0.45 lakhs was incurred. ²³

An Evaluation Study conducted in 1969 showed that out of 300 sample cultivators, 247 had obtained one or more forms of aid from the Block. The percentage of agriculturists who obtained improved seeds was 45.66 per cent, chemical fertilisers 76 per cent and pesticides 69.69 per cent. The survey further indicated that 54 per cent of the sample cultivators resorted to the use of improved seeds in their holdings. Chemical fertilisers were used by 87.67 per cent, green manure by 36.33 per cent and chemical pesticides by 80.67 per cent of the cultivators. ²⁴

As for the area under improved seeds, only 31.83 per cent of the total area was covered by improved seeds, the area under paddy being 35.77 per cent, area under cumbu 48.58 per cent and area under sugar-cane 47.97 per cent. In the case of ground-nut and ragi, the percentage of area covered by improved seeds was 18.31 per cent and 5.49 per cent respectively. The study further revealed that 87.66 per cent of cultivators were conversant with the utility of improved seeds, 81.33 per cent accepted it and 80 per cent actually adopted it in practice. Financial difficulty was reported to be the principal cause for the non-adoption of the improved agricultural practices by the cultivators. ²⁵

Karaikal Block :

The Karaikal National Extension Service Block, launched on 2 October 1956, covered about 64 villages and 46 hamlets consisting of a population of about 84,000 (1961) including Karaikal town. The block headquarters was first located at Tirunallar about 5 km. away from Karaikal. The office building for the Block and staff quarters were constructed on a plot measuring 3.5 acres at Talatteruvu which was obtained free of cost from H.M.T.S Maricar. The new building was declared open on 9 March 1962 and the headquarters was subsequently shifted to Talatteruvu. ²⁶

It was treated as a Stage-I Block with effect from April 1958. The Stage - I period was extended by 6 months from April 1961. The entire allotment of Rs. 12.00 lakhs for Stage-I was utilised. It entered Stage-II on 1 April 1962 and Post Stage-II on April 1967.²⁷

This was one of the 50 blocks selected for introducing the Pilot Scheme for the Development of Inland Fisheries in the country.

Mahe Block :

The Mahe pre-extension block with headquarters at Palloor was launched on 1 April 1959 covering the entire population of Mahe region. The block office headed by a Block Development Officer was located in a private building. It was converted into a Stage I Block with effect from 1 April 1961.

The schematic budget for Stage-II of the block was Rs. 5.07 lakhs. During the first five years of Stage-I period, the block was able to spend only Rs. 3.50 lakhs and therefore the period of Stage-I was extended by one year upto 31 March 1966. The block entered Stage-II with effect from 1 April 1966 and then entered Post Stage-II on 1 April 1972.

Yanam Block :

The Yanam pre-extension block covering the entire region was inaugurated on 5 May 1963 and entered Stage-I with effect from 1 March 1964*. This was also under the administrative control of a Block Development Officer. In view of the smallness of the area, the schematic budget for Stage-I was only Rs. 4.08 lakhs. The block entered Stage-II on 1 April 1969 and entered Post Stage-II with effect from 1 April 1974.

* The Eleventh Estimates Committee Report submitted before the Legislative Assembly on 13 April 1971 stated that it remained in the pre-extension stage upto 4 May 1964.

1. Techno-Economic Survey of Pondicherry (1965), p.6
2. Regional Transport Survey of Madras & Pondicherry (1967), p. 119
3. Techno-Economic Survey of Pondicherry (1965),p.46
4. Idem. p. 8 also vide pp.134-139 & 141-143
5. Idem. p. 4
6. Julien Vinson : L'Inde Française et les études indiennes de 1882 à 1884, p.31
7. B.A.A. 1847, pp. 356-59
8. Gazette extraordinaire No. 174, dt. 30 April 1976, pp.1-6
9. Techno-Economic Survey of Pondicherry (1965), p.77
10. Area Survey Report - Pondicherry State (1959), p. 11
11. P.V. Assemblée Représentative - 1ère Session ordinaire et Session extraordinaire de 1948, pp. 127-129
12. P.V. Assemblée Représentative, 2ème Session ordinaire de 1949, p. 6
13. " " " " " " 1950, pp. 13-15
14. Y.R. Gaebblé : Histoire de Pondichéry de l'an 1000 à nos jours, p.143
15. P.V. Assemblée Représentative, Session ordinaire de 1953, p. 18
16. Techno-Economic Survey of Pondicherry (1965), p. 8
17. Idem. p. 12
18. Idem., ad passim.
19. Study Area Profile - Pondicherry Region, p. ii.
20. Idem. pp. 176-177
21. The Eleventh Estimates Committee Report on Community Development Project submitted to the Assembly on 13 April 1971 - *ad passim*.
22. A.R. 1960-61, p. 25.
23. Fifth Five Year Plan - Approach Paper, p. 57.
24. Agricultural Activities—Villiyannur Block, An Evaluation Report, p. 11-16.
25. Idem. *ad passim*.
26. A.R. 1961-62, p. 34.
27. Fifth Five Year Plan - Approach Paper, p. 50.

CHAPTER—X

GENERAL ADMINISTRATION

I. Administrative set-up before merger

The many changes brought about from time to time in the constitutional set-up of the French establishments in India prior to merger have been touched upon in Chapter II. However, before proceeding to give an account of the administrative set-up as it took shape after merger, it would be useful to offer a brief description of the machinery as it existed prior to it.

The Commissaire de la République :

The Governor (known as **Commissaire de la République** from 30 August 1947), was the constitutional head of all the French establishments in India. ¹ He was appointed by the French Government in Paris and was the representative of the President of the French Republic. The **Ordonnance** of 23 July 1840 as it stood amended subsequently was the fundamental law that defined the powers of the Governor or the **Commissaire de la République**. He was vested with administrative, judicial and military powers. ²

The Governor was responsible for running the various branches of internal administration besides law and order. He exercised control over the budget, land utilisation, education, establishment of a new congregation or religious community, places of worship, cemeteries, charitable institutions, citizenship, passports, visas, etc. He had the right to summon before him any inhabitant, merchant or other individual found within the Territory in the interest of public service or order. The same right was exercised by the Administrators in the outlying regions. He could listen to and receive complaints addressed to him individually by the inhabitants of the colony. However, he had to send a report on them to the Minister for Colonies, forwarding all the official papers and inform him of the action taken by him. No person could be arrested under the security regulation except on an order signed by the Governor. He could interrogate an accused and hand over him within 24 hours to the Judiciary except in cases where he had to be tried extra judicially under article 51 of the Ordinance. In all such cases the matter had to be disposed of within eight days. The Governor could ban meetings or assemblies which were considered likely to disturb public peace and tranquility.

The judicial powers of the Governor were defined by the decree of 5 March 1927 which was applicable to the Governors of all colonies.³ While ensuring the free and prompt dispensation of justice, he received from the Chief of the Judiciary periodical reports which he forwarded to the Minister for Colonies. He had no right to interfere in matters which fell within the competence of the Tribunal. However, he enjoyed the right of entry into the court when the courts reopened and occupied a seat near the Presiding Judge on the dais. The exercise of this right was optional. He even exercised control over the members of the Judicial Service on matters of discipline.

His authority on religious matters was exercised in accordance with the ordinances, edicts and declarations in force, but all ecclesiastical matters fell within the realm of the *Préfet Apostolique* or other ecclesiastical authorities. The Governor also exercised control over the Public Prosecutors and the Administrators of outlying regions. His decisions were final, whenever there were differences among the officers of the colony, on matters of precedence and rank. He had the power to discharge or dismiss employees appointed by him. He called for reports on the conduct and capacity of the officers and other Government servants of all grades, every year from the Heads of Departments and sent the reports to the Minister with his own remarks. He sent his own assessment reports on the Heads of Departments.

The Governor was authorised to correspond with the Governor-General and Governors of foreign possessions in India on matters concerning these establishments. Whenever authorised, he could carry on negotiations within the limits of such authorisation on commercial or other conventions ;⁴ but he was not authorised to conclude them without the ratification of the President of the Republic.

The Governor had the authority to promulgate laws, ordinances, orders and rules in the colony. The laws, ordinances and rules as were in force in France could not be applied to the colony unless ordered by the President of the French Republic. The Governor could issue orders and pass decisions to regulate administrative and policy matters and for the enforcement of laws and ordinances, whose application in the colony had been decided upon. Whenever the Governor deemed necessary to introduce amendments or new provisions in the colonial laws, he had to frame the same in council and forward them to the Minister for obtaining the approval of the President of the Republic.

As part of his extraordinary powers, the Governor could modify the budgetary allocations. However, the total provision could not be exceeded, unless it was urgent.

Whenever officers appointed by the President of the Republic or the Minister stood accused of misconduct, the Governor could suspend them after communicating to them in writing the charges framed against them pending the orders of the President of the Republic or the Minister. As for the Heads of the Departments or members of the judicial service, etc., the Governor should provide them the means for proceeding to France for explaining their conduct before the Minister for Colonies. If they refused to comply with the instructions of the Governor, they could be suspended. In any case, they would cease to function forthwith. The Governor however was required to send immediately to the Minister a report on the action taken by him in exercise of the extraordinary powers, together with all necessary documents.

The Governor could be prosecuted for treason, misappropriation of public funds, misuse of authority or disobedience of the orders of the President of the Republic. The proceedings, whether instituted at the instance of the Government or on the complaint of an interested party, were conducted according to the rules prescribed in France in respect of civil servants. If the Governor were to be charged with expenditure unduly drawn from public funds, materials and labour, administrative proceedings alone could be launched against him. No suit or prosecution were to be launched against him in the colony during his tenure as Governor. All such action could be brought only before the courts in France. No decree or judgment can be put into execution against the Governor while in the colony.

Every year the Governor was required to submit to the Minister for Colonies a memorandum on the general situation in the colony. He had to report the activities of all departments of the administration, give an account of the improvements effected during the year, point out defects, if any, to be rectified and propose such measures for the improvement of the Government and the prosperity of the inhabitants. The Administrators of the outlying establishments in turn had to submit to the Governor an annual report which was forwarded by the Governor with his own remarks to the Minister for Colonies. During his tenure the Governor was not permitted either to acquire landed properties or marry anyone in the colony without the authorisation of the President.

The Governor's powers ceased the moment his successor landed, in the event of his recall. The outgoing Governor handed over charge to his successor in the presence of the officers at the headquarters of the colony. He had to furnish to his successor a detailed memorandum of the operations commenced or proposed during his administration and of the local situation together with a list of officers and employees of the Government in the colony. He was also required to hand over to his successor with an inventory, his registers of correspondence and all letters and official documents relating to the administration, without retaining for himself any of them, with the exception of confidential and secret correspondence. In the event of his death, absence or any other exigency and his successor having not yet been appointed, the Governor's functions were to be temporarily discharged by the **Chef du Service Administratif**.

Conseil de Gouvernement:

The Governor was assisted in the discharge of his functions by a **Conseil d'administration** which subsequently came to be known as **Conseil Privé** * and finally with effect from 19 August 1947 as **Conseil de Gouvernement**. This council consisted of the (1) **Secrétaire Général**, (2) Chief of the Judicial Department, (3) Chief of the Education Department, (4) President of the Representative Assembly, (5) President of the Permanent Commission of the Representative Assembly, (6) President of the Chamber of Commerce and (7) Chief of the Civil and Military Services as co-opted members. The decree of 12 April 1947 was superseded by another order of 12 August of the same year re-constituting the Council of Government. ⁵ Accordingly, the administration was conducted by the Council of Government consisting of six members under the Presidentship of the Governor. Out of the six members of the **Conseil de Gouvernement** at least three were elected by the Representative Assembly and three others nominated by the Governor at his discretion. However, in actual practice all the six members came to be chosen from among the members of the Representative Assembly. The Governor might delegate to any one of the members of the Council his power to preside over the assembly. The Council of Government was bound by the resolutions passed by the Representative

*As modified by the **Décret** of 7 February 1935, it consisted of the Governor, **Procureur Général**, **Chef du 1er Bureau du Gouvernement** and two members of the **Conseil Colonial**.

Assembly. The Council could also discuss all draft orders by the Governor except those passed for the enforcement of laws. Those orders, over which the Council had completed its deliberations, were countersigned by one of the members of the Council. The Governor may, by an order, entrust to a member of the Council the responsibility over a Department. The Consellor so nominated by the Governor administered the Department with the help of the chief of that Department. Reports from the various heads of offices would be heard by the Council of Government with the prior permission of the Governor. 6

Representation in the French Parliament :

Sénateur and Député : French India was represented in the *Chambre des Députés* in France by a *Député* and in the *Sénat* by a *Sénateur*.

Assemblée Représentative :

The French establishments were provided with a Representative Assembly by the *décret* of 25 October 1946 which was promulgated by the *arrêté* of 10 November 1946. This Assembly first met in session on 6 January 1947 and consisted of 44 members as detailed below :

Pondicherry	..	22
Karaikal	..	12
Chandernagore	..	5
Mahe	.. ..	3
Yanam	.. ..	2

At the time of *de facto* merger, the Assembly consisted of only 39 members as Chandernagore no longer formed part of the French possessions in India.

The Territorial Division :

For purposes of administration, the territory was divided into sixteen communes (excluding Chandernagore) each administered by a Municipal Council headed by a Mayor. The Mayor was responsible for the enforcement of laws and orders passed by the Governor in the area under his jurisdiction. He also assisted the various departments of the Government in carrying out their tasks. The Mayor had powers to issue orders based on the resolution of the Council in matters having a bearing on public health and even on such matters as maintenance of public order.

II. The period of transition (1954-1963)

After almost 300 years of foreign occupation, Pondicherry, Karaikal, Mahe and Yanam were united with the rest of the country following an agreement reached on 21 October 1954 between the Governments of India and France. "In the year one thousand nine hundred and fifty-four on the first November at 6.45 a.m. in conformity with the agreement reached on the twenty-first October at Delhi by the Governments of France and India, Mr. Pierre Landy, Diplomatic Counsellor representing the Government of French Republic handed over to Mr. Kewal Singh representing the Government of the Republic of India the administrative powers in respect of the French Settlements in India."

Before proceeding to describe the administrative set-up of this Territory, it may not be out of place to trace the developments briefly which led to the creation of the Union territory of Pondicherry in 1963.

Although *de facto* merger took place on 1 November 1954 it would be interesting to note that the Indian Constitution was so framed keeping in view the future status of foreign possessions which existed in India in 1950. In fact article 1 (3) (c) referred to "such other territories as may be acquired" as forming part of the Indian Union, indicating thereby that these foreign possessions would join the Indian Republic at a future date.

It may also be recalled that the Government of India had made it clear as early as 1949, their policy regarding the post-merger status of the French establishments. In an official communique issued by the External Affairs Ministry on 27 October 1949 the Government of India declared "that in the event of the French possessions in India deciding to join the Indian Union, they will be administered as an autonomous unit in direct relation with the Central Government" The communique further stated that "any subsequent changes in the internal administrative set-up of these settlements will be carried out only after consulting local public opinion. The special linguistic and cultural interests of the people of these settlements will be preserved. The Government of India would provide adequate funds for carrying on their administration and for the payment of pensions and similar commitments of the existing administration." ⁷ Thus the Government of India assumed full administrative powers and inherited all administrative rights and obligations in the

establishments. Following the take-over of the establishments the areas comprising the French establishments in India (Pondicherry, Karaikal, Mahe and Yanam) were redesignated as "the State of Pondicherry" by the French Establishments (Change of Name) Order 1954 issued by the Ministry of External Affairs.

As from 1 November 1954, the Chief Commissioner appointed by the Central Government became the Head of the Pondicherry State. He was assisted by a Council of Government of which he was the President. There were six Councillors. All were elected by the members of the Representative Assembly.

The State of Pondicherry (Representative Assembly Decree Amendment) Order, 1955 came into force at once. As from the commencement of this order the décret of 25 October 1946 passed by the Government of France instituting a Representative Assembly came to have effect with slight modification viz. all references to "Conseil d'Etat, Council of Ministers, Ministry of French Overseas Territory" etc. came to be construed respectively as references to the Central Government and orders made by the Central Government. ⁸

In pursuance of the provision of article 32 of the décret of 25 October 1946 as amended by the State of Pondicherry (Representative Assembly Decree Amendment) Order, 1955 the Government of India dissolved the Representative Assembly of the State of Pondicherry.

The State of Pondicherry (Representation of the People) Order, 1955 was promulgated in exercise of the powers conferred by sections (3) and (4) of the Foreign Jurisdiction Act, 1947 (XLVII of 1947) enabling this Administration to conduct the elections. The order specified the number of seats as 39 in the Representative Assembly and as 200 for the Municipalities. Except Pondicherry and Karaikal Communes which had 18 and 14 seats respectively, all the other fourteen Communes had 12 seats each. Fresh elections were conducted in July 1955 to elect 39 members for the State Representative Assembly and 200 members for the Municipalities.

Although *de jure* sovereignty continued to vest in the French Government, provision was made for the constitution of a Joint Commission, consisting of three representatives of each country to consider and settle all outstanding questions. This Franco-Indian Commission completed its task in six months.

On 28 May 1956, the Treaty of Cession was signed at New Delhi by Prime Minister Jawaharlal Nehru on behalf of the Government of India and His Excellency Count Ostrorog on behalf of the Republic of France (*vide* Appendix I for full text of the Treaty and the annexed Protocol) subject to ratification by the Parliaments of the respective countries.

In the meanwhile, it must be noted that the Constitution (Seventh Amendment) Act, 1956 and the States Reorganisation Act, 1956 were passed to give effect to the recommendations of the State Reorganisation Commission. The former Act reduced the four categories of States (Part A, B, C & D) to two viz. States and Union Territories. The total number of Union Territories was six. To provide for the administration of the Union Territories, articles 239 and 240 were amended. Article 239 (1) provided for every Union Territory to be administered by the President acting through an Administrator to be appointed by him. Article 240 which empowered Parliament to create Legislatures and Council of Advisers or Ministers in Part C States was omitted so that Union Territories could not have Legislative Assemblies or Council of Ministers or Advisers.

There was dissatisfaction in some of the Union Territories on the administrative arrangements. These territories demanded a greater measure of responsible government. In order to examine these questions, the Government of India appointed a committee under the Chairmanship of Asoke K. Sen, the then Union Law Minister. The Committee took the view that the territories should be given the largest measure of autonomy and that the people should be associated with the Administration at every level.⁹ Understandably the developments in Pondicherry and Goa underlined the urgent need for the creation of full-fledged Legislative Assemblies responsible to the people.

The year 1962 was a landmark in the history of this Territory. The Treaty of Cession signed on 28 May 1956 at New Delhi was ratified by the French Parliament on 27 July 1962. On 16 August 1962, Pandit Jawaharlal Nehru, Prime Minister of India and Mr. Jean Paul Garnier, French Ambassador in India exchanged the Instruments of Ratification under which France ceded to India full sovereignty over the territory. The same year the constitutional set-up of the Union Territories was also changed by the Constitution (Fourteenth Amendment) Act, 1962 by which the old article 240 was restored with a slight change as article 239-A. Under this article, Parliament was given power to

create a Legislature or Council of Ministers or both for the Union Territories including Pondicherry. Article 240 was amended to provide that once a Legislature was introduced in Goa and Pondicherry, the President's powers to make regulations for these territories would stand withdrawn. The Fourth Schedule of the Constitution was amended in order to allot one seat for Pondicherry in the Rajya Sabha and the Government of Union Territories Act, 1963 provided one seat in the Lok Sabha.

Under amended article 240 of the Constitution which took effect from 16 August 1962, the President was empowered to make regulations for peace, progress and good government of the territory until a legislature started functioning. Similarly under the amended article 241 (1) Parliament was empowered to constitute by law a High Court for the Union Territory or to declare any court in any such territory to be a High Court for all or any of the purposes of the Constitution.

Following the Constitutional change in the status of the establishments, the Pondicherry (Administration) Ordinance was issued by the President on 6 November 1962. The Ordinance was later replaced by the Pondicherry (Administration) Act, 1962. Both the Ordinance and the Act were deemed to have come into effect on 16 August 1962. The Act, *inter alia* provided for the continuance of the existing laws, their adaptation, existing taxes, officers and functionaries, etc. until otherwise decided by the competent legislature or authority. The Act also enabled the Government of India to extend to Pondicherry by notification in the Official Gazette, any enactment in force in a State with such restrictions and modifications as it thought fit. Further, it extended the jurisdiction of the Madras High Court to Pondicherry with effect from 6 November 1962 and invested the Madras High Court with jurisdiction formerly exercised by the *Cour de Cassation*, the *Cour Supérieure d'Arbitrage* and the *Conseil d'Etat de France*. The Madras High Court issued a notification for regulating the procedure to be followed in respect of the proceedings instituted in the High Court under the Pondicherry (Administration) Act, 1962. In accordance with this Act, the *status quo* in the matter of internal administration i.e. observance of the existing taxes etc. was maintained. The Citizenship (Pondicherry) Order, 1962 was passed by the Government of India on 29 November 1962. Under this order, every French national born in Pondicherry and domiciled therein or elsewhere in India on 16 August 1962 became a citizen of India from that date. Enabling provisions were also made in the same order for those who wished to opt for French nationality and for the French nationals born in Pondicherry and domiciled on 16 August 1962 in a place outside Pondicherry or India to acquire Indian citizenship.

III. The present set-up

The year 1963 witnessed important changes in the administrative set-up in the territory, following the enactment by Parliament of the Government of Union Territories Act, 1963 which provided for Legislative Assemblies and Council of Ministers in the Union Territories. As for this Territory, sections 1, 2, 53, 56 and 57 and Schedule II touching upon election to Parliament and President's powers came into force with effect from 13 May 1963 and all the remaining provisions came into force on 1 July 1963. With the enactment of this Act the decree of 25 October 1946 as subsequently amended, instituting a Representative Assembly in Pondicherry, and the decree of 12 August 1947 as subsequently amended relating to the setting up of a **Conseil de Gouvernement** in Pondicherry and the State of Pondicherry (Representation of the People) Order, 1955 in so far as it related to the Representative Assembly of Pondicherry stood repealed. The territory, however, continued to be under the direct control of the Government of India in the Ministry of External Affairs until 31 August 1964 after which it came under the control of the Ministry of Home Affairs. ¹⁰

The Lieutenant-Governor :

The Union Territory is legally administered by the President acting through an Administrator called the Lieutenant-Governor appointed under article 239 of the Constitution. The Lieutenant-Governor exercises his executive powers either directly or through subordinate authorities in accordance with the provisions of the Constitution and the delegated authority of the President. The post of Chief Commissioner was redesignated as Lieutenant-Governor. Shri S. L. Silam assumed charge on 14 October 1963 as the first Lieutenant-Governor of Pondicherry. ¹¹ The Lieutenant-Governor and his Council of Ministers function under the general control of the President (Section 50). The Lieutenant-Governor is required to summon the Legislative Assembly at least once in six months. He is also empowered to prorogue or dissolve the Assembly (Section 6). He could address and also send messages to the Legislative Assembly with respect to a Bill pending in the Assembly or otherwise (Section 9). In case the President is satisfied that a situation has arisen in which the administration of the Union Territory cannot be carried out or that for the proper administration of the territory, it is necessary or expedient to do so, he may suspend the operation of all or any of the provisions of this Act for such period as he

thinks fit and make such consequential provisions necessary for administering the Union Territory under article 239 of the Constitution (Section 51). The President could act thus either on receipt of a report from the Administrator or otherwise.

The administrative functions are attended to by the Lieutenant-Governor's Secretariat headed by the Secretary to the Lieutenant-Governor who exercises control over the establishments of the Lieutenant-Governor's Office and all matters under the Lieutenant-Governor's Secretariat and his house-hold.

The Council of Ministers:

The Act provides for a Council of Ministers with the Chief Minister at the head to aid and advise the Administrator in the exercise of his function in relation to matters with respect to which the Legislative Assemblies has power to make laws, except in so far as he is required by or under this Act to act in his discretion or by or under any law to exercise any judicial or quasi-judicial function. The Chief Minister holds office during the pleasure of the President. While the Chief Minister is appointed by the President, other ministers are appointed by the President only on the advice of the Chief Minister. The Council of Ministers are collectively responsible to the Legislative Assembly of the Union Territory (Section 45). Whenever there are differences of opinion between the Administrator and his Ministers, the Administrator shall refer the matter to the President for his final decision and act according to the decision given by the President. In matters which are urgent, he may take immediate action or give such direction without reference to the President.

Speaker and Deputy Speaker:

The members of the Legislative Assembly, soon after its formation, elect the Speaker and the Deputy Speaker from among themselves. Such election also takes place so often as the Office of the Speaker or Deputy Speaker, as the case may be, becomes vacant. Once the Assembly is dissolved, they cease to be members of the Legislative Assembly and consequently the Deputy Speaker shall vacate his office. The Speaker, however, shall not vacate his office until immediately before the first meeting of the Assembly after the dissolution. The Speaker or the Deputy Speaker may by writing addressed to the Deputy Speaker or to the Speaker respectively, resign his office.

The Speaker or the Deputy Speaker may be removed from his office by a resolution passed by a majority of all the members of the legislature. However, at least fourteen days' notice must be given of the intention to move such a resolution. While such resolution is under the consideration of the Assembly, the Speaker or the Deputy Speaker against whom the resolution stands shall not preside over the sittings, even though present. As per section 33 (2) of the Government of Union Territories Act, 1962 the Rules of Procedure and Conduct of Business of the Uttar Pradesh Legislative Assembly 1958 with certain modification and adaptation as were found necessary, were made applicable in relation to the Legislative Assembly, till its own rules were formulated and adopted by the Assembly on 24 March 1966.

The Legislative Assembly:

The Territory's legislature is unicameral and consists of thirty members chosen by direct election. The Central Government is empowered to nominate not more than three persons to be members of the Assembly. This power had never been exercised. Seats are reserved for Scheduled Castes in the Territory.

Subject to the provision of the said Act, the Legislative Assembly is empowered to make laws for the whole or any part of the Union Territory concerning any of the matters enumerated in the State List or the Concurrent List in the Seventh Schedule to the Constitution without derogation from the legislative powers conferred on the Parliament in respect of the Union Territories. The properties of the Union Government are exempt from all taxes imposed by the Assembly or under any other law in force in the Union Territory. With regard to taxes levied before the commencement of the Constitution, this will continue to be levied until Parliament decides otherwise. If any law passed by the Legislative Assembly of the Union Territory is found repugnant to the law of Parliament, the law of Parliament alone would prevail under section 21 of the Government of Union Territories Act, 1963 as amended by section 4 of the Government of Union Territories (Amendment) Act, 1975. Any such law made by the Assembly would be void to the extent of its repugnancy.

There are certain restrictions on the legislative powers of the Assembly in regard to financial bills. No financial bill or an amendment to such Bill should be introduced or moved in the Assembly except on the recommendation

of the Administrator. But such recommendation will not be required for moving an amendment for reduction or abolition of any tax. However, a Bill or amendment which provides for imposition of fines or other pecuniary penalties, demand or payment of fees for licences or fees for services rendered, or for the imposition, abolition, remission, alteration or regulation of any tax by any local authority or body for local purposes shall not require the prior sanction of the Administrator. But if such bill involves expenditure from the Consolidated Fund, the recommendation of the Administrator would be necessary.

The Assembly is prohibited from passing a Bill which, if enacted and enforced, would involve expenditure from the Consolidated Fund of the Union Territory, without the Administrator's prior recommendation for consideration of the Bill (Section 23).

The sittings of the Assembly used to be held in the Pondicherry Town Hall. Since 1969, the sittings are held in the old tribunal building which was modified and refurnished to accommodate the Assembly Hall, the Legislature Secretariat and the Ministers' Chambers.

All Bills passed by the Assembly should be presented to the Administrator who may either give his assent to the Bill or withhold it or reserve the Bill for the consideration of the President.* It is open to the President either to assent or withhold assent to the Bill or direct the Administrator to return the Bill with a message requesting the Assembly to reconsider the Bill or any special provisions thereof or consider the desirability of introducing any amendment as recommended by him in his message. Thereupon, the Assembly will have to reconsider the Bill within a period of six months after it is passed by the Assembly and then present the same again to the President for consideration. All Bills pending in the Assembly would lapse on its dissolution but not on its prorogation.

The First Assembly met on 20 July 1963. The Second which met on 19 September 1964 was dissolved on 18 September 1968. The Third Assembly which met on 22 March 1969 had also to be dissolved on 3 January 1974.

* Prior to the enactment of the Government of the Union Territory (Amendment) Act, 1971, Bills were presented to the Administrator who had to reserve them for the consideration of the President (*vide* Sections 25 and 25-A).

The Fourth Assembly met in session on 26 March 1974 and faced dissolution on 28 March 1974. In all, the First Assembly had 28 days of sitting, the second had 106 days, the Third had 107 days and the Fourth had only two days. There were five Scheduled Caste members in the Second, Third and Fourth Assemblies.

The Budget :

The Budget or the Annual Financial Statement of the estimated receipts and expenditure of the Union Territory are to be laid before the Legislative Assembly with the previous approval of the President. Those estimates of expenditure are to be prepared showing the sums required to meet the expenditure charged upon the Consolidated Fund of the Union Territory and the sums required to meet other expenditure proposed to be made from the Consolidated Fund separately. This expenditure charged upon the Consolidated Fund of the Union Territory may be discussed but shall not be votable by the Legislative Assembly of the Territory. The remaining non-chargeable expenditure shall be submitted in the form of demands for grants to the Assembly for being voted. The Assembly may assent or refuse to assent to any demand or assent to any demand subject to reduction of the amount specified. But without the recommendation of the Administrator, no demand for a grant can be made (Section 28).

Committees of the Assembly:

At the commencement of the first session after each general election and thereafter before the commencement of each financial year or from time to time when the occasion otherwise arises, different committees or specific or general purposes are either elected or constituted by the House or nominated by the Speaker. The Chairman of these committees are either appointed by the Speaker or are elected by the committees from amongst their members. These committees may in turn appoint one or more sub-committees, each having the powers of the undivided committee, to examine any matter that may be referred to them. The reports of such Sub-Committees will have the same merit as the report of the whole committee if approved at a sitting of the whole committee.

Business Advisory Committee :

The Business Advisory Committee nominated by the Speaker consists of not more than six members including the Speaker and the Deputy Speaker, with the Speaker functioning as the ex-officio Chairman of the Committee. The Committee recommends the time to be allocated for the discussion of Government Bills or other Government business

as the Speaker may refer to the Committee in consultation with the Leader of the House. The Committee will also have such other functions relating to the business of the House as may be assigned to it by the Speaker.

Committee on Public Accounts :

This Committee consisting of not more than seven members is elected by the House. The Finance Minister and the Chairman of the Committee on Estimates are its ex-officio members. It keeps a watch over Government spending and examines the accounts of State Corporations, autonomous and semi-autonomous bodies etc. The two reports of the Public Accounts Committee came out first during the Second Assembly. The Third had to its credit seven reports.

Committee on Estimates :

This Committee consists of not more than seven members elected by the House from amongst its members. The Finance Minister and the Chairman of the Public Accounts Committee are its ex-officio members. It is the responsibility of this Committee to recommend ways to effect economy and improvements in the administration and examine as to whether the money is well laid out and to suggest the form in which the estimates shall be presented to the Assembly. While the Second Assembly brought out 15 reports, the Third Assembly brought out as many as 30 reports covering Fisheries, Education, Public Works, Police, Harijan & Social Welfare, Agriculture, Community Development, Medical & Public Health, Stationery and Printing, Electricity, Industry, Labour & Employment, Co-operation, Animal Husbandry and Port.

Committee on Government Assurances :

This Committee consists of not more than six members nominated by the Speaker. Its responsibility is to report to the House the extent to which the assurances given by the Ministers on the floor of the House are implemented and within the minimum time necessary for the purpose.

Select Committee :

An eight-member Select Committee is constituted by the House whenever a motion that a Bill be referred to a Select Committee is made and agreed to. The Committee is to consist of the Minister in-charge of the Bill or the Member in-charge of the Bill as well as six members, as the case may be, of the Assembly to be elected by the method of proportional representation by means of the single transferable vote.

The Select Committee will be called upon to submit the report within a stipulated time limit. In all, three Bills which were sent to the Select Committee during the Second Assembly were reported upon. The two Bills, referred to the Select Committee of the Third Assembly lapsed following the dissolution of the Assembly.

Committee on Privileges :

The rules provide for a Committee on Privileges consisting of six members including the Deputy Speaker who will be the Chairman of that Committee. All issues of breach of privilege either of a member or of the House or of a Committee are referred to this Committee for its report. Four such cases were examined during the Third Assembly as against two during the Second Assembly.

Other Committees :

The members of the Committee on Petitions and the Committee on Delegated Legislation not exceeding six members in each are nominated by the Speaker. The six-member Rules Committee includes the Speaker and the Deputy Speaker besides others.

The Legislature Secretariat :

Following the new set-up of the Legislative Assembly, the Legislature Secretariat was strengthened in 1964. The Secretariat is headed by a Secretary who is responsible for the smooth functioning of the Legislature Secretariat. He assists the Speaker for the smooth functioning of the Legislative Assembly.

The Consolidated Fund of the Union Territory :

The Consolidated Fund of the Union Territory was constituted on 1 July 1963 as determined by the Government of India. This Fund consists of all revenues received in a Union Territory by the Government of India or the Administrator of the Union Territory with regard to any matter within the Legislative competence of the Legislative Assembly of the Union Territory, all grants made and all loans advanced to the Union Territory from the Consolidated Fund of India and all moneys received by the Union Territory in repayment of loans.

The following expenditure is charged on the Consolidated Fund of the Territory :

The emoluments and allowances of the Administrator and the expenditure of his office as may be determined by the President by general or special order ; salaries and allowances of the Speaker and the Deputy Speaker of the Assembly ; charges payable in respect of loans advanced

to the Union Territory from the Consolidated Fund of India including interest, sinking fund charges, redemption charges and other expenditure connected therewith ; any sum to satisfy the judgment, decree or award of any court or arbitral tribunal ; expenditure incurred by the Administrator in the discharge of his special responsibility or any other expenditure authorised by law of the Parliament or the Legislative Assembly of the Territory to be charged (Section 27) will be charged on the Consolidated Fund of the Territory.

The withdrawal of money from the Consolidated Fund is authorised by Appropriation Acts passed by the Legislature in accordance with the provisions of section 29 of the Government of Union Territories Act, 1963. The custody of the Consolidated Fund of the Territory, the payment of moneys into such Fund, withdrawal of moneys therefrom and all other ancillary matters are governed by the Consolidated Fund of the Union Territory of Pondicherry Rules, 1963 as notified in the Official Gazette of Pondicherry Extraordinary No. 15 dated, 1 July 1963 and as amended in the notification published in the Extraordinary Gazette No. 31 dated, 15 March 1969.

The Contingency Fund :

The Contingency Fund of the Union Territory is of the nature of an imprest into which is paid from and out of the Consolidated Fund of the Union Territory, such sums, as may be determined by law made by the Legislative Assembly. The said Fund is held by the Administrator to enable him to make advances out of such Fund to meet unforeseen expenditure pending authorisation of the Legislative Assembly. The Contingency Fund of Pondicherry Act, 1964 was assented to by the President on 10 April 1964. All matters connected with the payment into and the withdrawal of money from the Contingency Fund and its custody are governed by the Contingency Fund of Pondicherry Rules as notified in the Official Gazette of Pondicherry No. 28, dated 14 July 1964. The amount was increased from Rs. 5.00 lakhs to Rs. 10.00 lakhs by the Pondicherry Contingency Fund (Amendment) Act, 1970.

The Secretariat :

The Secretariat system of administration in Pondicherry is a post-merger innovation. Under this system, the Secretariat deals with all policy matters. All dealings and correspondence with the Central Government and other State Governments are also attended to by the Secretariat Departments as specified

by the Business of the Government of Pondicherry (Allocation) Rules, 1963 framed by the President in exercise of the powers conferred by article 239 of the Constitution and section 46 of the Government of Union Territories Act, 1963. (*vide* Appendix II). With effect from 1 July 1963 the business of the Government came to be transacted in such of the Departments (12) as specified in the schedule to the Business of the Government of Pondicherry (Allocation) Rules, 1963.¹² The following are the Departments :

<i>Secretary-in-charge</i>	<i>Names of the Departments</i>
1. Chief Secretary.	I. Confidential & Cabinet Department.
	II. Home Department.
	III. Appointments Department.
2. Secretary (General Administration)	IV. General Administration Department.
	V. Education Department.
3. Secretary (Planning & Development)	VI. Planning & Development Department.
	VII. Medical & Public Health Department.
4. Secretary (Finance)	VIII. Finance Department.
	IX. Revenue Department.
5. Secretary (Law)	X. Legislative & Judicial Department.
	XI. Labour Department.
6. Secretary to Lt. Governor	XII. Local Administration Department.

The posts of all Secretaries except that of Law & Labour are now fed by the Indian Administrative Service. Since then several changes have been brought about in the nomenclature as well as the allocation of business of the various Departments.* The allocation of business of the Government among the Ministers is also made by the Lieutenant-Governor on the advice of the Chief Minister in accordance with the Business of the Government of Pondicherry (Allocation) Rules, 1963.

* The designation of some of these Departments as well as the business allocated to the various Departments as determined by the Business of the Government of Pondicherry (Allocation) Rules, 1963 have undergone many changes since then.

An Inspection Team of the Government of India which visited Pondicherry in 1967 put forward some suggestions for toning up the efficiency of the administration. Based on its recommendation, some Heads of Departments were conferred with ex-officio Secretariat status, simultaneously introducing the single file system with reference to those Departments *vis-a-vis* the Secretariats, with a view to bringing about speedy disposal of papers.

The following non-Secretariat executive functionaries of the Administration were conferred with appropriate ex-officio status so as to enable them to sign communications, orders and notifications and to take decisions on behalf of the Government:

- | | |
|--|--|
| 1. Director of Education | Ex-officio Secretary/Deputy Secretary. |
| 2. Director, Public Works Department | Ex-officio Joint Secretary. |
| 3. Director of Health and Family Planning Services | Ex-officio Deputy Secretary. |
| 4. Deputy Commissioner (Commercial Tax) | Do. |
| 5. Director of Civil Supplies | Do. |
| 6. Assistant Commissioner (Commercial Tax) | Ex-officio Under Secretary. |
| 7. Additional District Magistrate .. | Do. |
| 8. Director of Survey & Land Records | Do |
| 9. Deputy Director of Education (Administration) .. | Do. |
| 10. Deputy Director of Education (Planning) | Do. |
| 11. Director of Information, Publicity & Tourism .. | Do. |
| 12. Director of Transport .. | Do. |
| 13. Labour Commissioner .. | Do. |
| 14. Assistant Chief Electoral Officer .. | Do. |
| 15. Deputy Director (Rural Development Administration) .. | Do. |
| 16. Special Officer for Religious and Charitable Endowments .. | Do. |

Government employees :

Prior to merger every appointment, promotion and leave sanctioned to every category of government employees was invariably notified in the *Journal Officiel* leaving no room for classification of public servants into gazetted and non-gazetted. Now public servants fall under two categories viz. gazetted and non-gazetted, grouped into four classes. All Class II posts in this Administration are gazetted posts. Some Class III posts have been classified as gazetted on the recommendation of the Third Pay Commission.

Soon after merger it became almost imperative to obtain the services of experienced administrative personnel from the neighbouring States to man some of the services of this Administration and to cope up with the tempo of developmental activities.

Since September 1955 recruitment for the various posts in this Administration was carried out through a Recruitment Committee constituted for the purpose. This Committee consisted of the Chief Commissioner who was the President of the Committee, the *Secrétaire Général* and the Counsellor for Finance and the Counsellor for Public Works, Industries and Labour as members. At the time of selection, the Counsellor of the concerned Department was also co-opted. The Committee thus constituted examined the personal documents, educational qualifications of the candidates and selected the persons by conducting oral interviews. The decision of the Committee was final.¹³ Following the introduction of the Union Territories Act, 1963, and the reorganisation of the Secretariat Departments in July 1963, Departmental Promotion Committees and Recruitment Committees were constituted.

In the meanwhile there was a clamour both among local and political elements for the repatriation of deputationists to their parent states as and when their tenure of deputation expired. A good number of them left this administration as and when they were due for promotion in their parent state. A few got absorbed in the local services.

The Lieutenant-Governor is delegated with powers to create permanent and temporary posts in Class II, III and IV services. He is also empowered to create, for any specified period, posts in Class I service carrying a scale of pay upto Rs. 1,800 in respect of which he is the appointing authority. However all proposals for the creation of posts have to be placed before the Work Study Group for its clearance.

The Lieutenant-Governor is delegated with powers to frame recruitment rules for all categories of posts except those of the I.A.S. and I.P.S. cadres. However the Union Public Service Commission has to be consulted while framing recruitment rules for Class I and II posts, except for such posts which are exempted under the Union Public Service Commission (Exemption from Consultation) Regulations, 1958. The recruitment rules also provide for the drafting of suitable personnel from the neighbouring States or from the Centre whenever no personnel suitable were found available locally.

The allotment of I.A.S. and I.P.S. personnel to this Territory rests with the Government of India. Direct recruitments to Class I and Class II posts are normally effected only on the recommendation of the Union Public Service Commission to which references are made by the Administration. Whenever it is proposed to make an appointment in anticipation of the Union Public Service Commission's concurrence, the Departmental Promotion Committee without the member of the Union Public Service Commission for Class I posts and the Departmental Promotion Committee for Class II posts would constitute the Recruitment Committee in respect of such *ad hoc* appointments. These *ad hoc* appointments have to be subsequently regularised by means of a reference to the Union Public Service Commission.

Candidates for common category posts such as Lower Division Clerks, Typists and Stenographers are selected on the basis of the results of competitive examinations held by the Administration from time to time. As regards other Class III posts in the Secretariat, the selection is made by a Recruitment Committee consisting of the Chief Secretary as its Chairman and other Secretaries to Government as members, whereas for Class III posts outside the Secretariat, the Committee consists of the Secretary of the Department concerned as Chairman, the Head of the Department concerned and the Under Secretary dealing with the subject as members. After the introduction of Central pay scales no direct recruitment to the posts of typists is made.

The Recruitment Committee for Class IV Secretariat posts consists of two officials *viz.* the Secretary of the Department (Chairman) and any Under Secretary of the Department. In respect of Class IV Non-Secretariat posts the Committee consists of the Head of the Department, his deputy and the Under Secretary dealing with that Department.

There are separate Departmental Promotion Committee for Class I posts, Class II & III Secretariat posts, Class II and Class III Non-Secretariat posts, Class IV Secretariat and Non-Secretariat posts to deal with all matters connected with the promotion of Government employees.

The erstwhile Appointments Department used to conduct departmental tests for certain categories of staff under this Administration. In 1971, it was considered necessary to conduct such qualifying tests for all categories of staff under this Administration to equip them with adequate knowledge of rules, regulations etc. for the efficient discharge of their duties and responsibilities. Accordingly, an elaborate Schedule was drawn up for the conduct of tests in consultation with the Heads of Departments/Offices.

The Pondicherry Civil Service :

With a view to bringing some of the Class II Gazetted posts in this Administration under a common cadre, a Central Civil Service known as the "Pondicherry Civil Service" was constituted under the Pondicherry Civil Service Rules, 1967 with an authorised permanent strength of 38 posts which included specific posts under the Government of Pondicherry as well as a few posts as deputation, leave and training reserve.

The Pondicherry Civil Service Cadre as constituted in 1967 consisted of the following posts :

(i) Deputy Secretary	..	1
(ii) Labour Commissioner	..	1
(iii) Director of Industries	..	1
(iv) Under Secretaries	..	10
(v) Administrators	..	3
(vi) Deputy Collectors	..	3
(vii) Project Executive Officer, Villianur	..	1
(viii) Special Officer for Elections	..	1
(ix) Public Relations Officer	..	1
(x) Deputy Director of Education (Admn.)	..	1
(xi) Publicity Officer	..	1
(xii) Labour Officer Grade I	..	1
(xiii) Executive Magistrate	..	1
(xiv) Inspector of Municipal Councils and Local Boards	..	1
(xv) Registrar of Co operative Societies	..	1
(xvi) Director of Fisheries	..	1
		<hr/> 29
Deputation, leave, reserves, etc.		9
		<hr/> 38
Total	..	<hr/> 38

At the time of its initial constitution, 16 officers were appointed to the cadre and the remaining posts were to be filled at not more than 50% of the substantive vacancies which were to occur from time to time in the authorised permanent strength by direct recruitment and the remaining by promotees. This ratio was revised as 50 : 50 between direct recruits and promotees in September 1974. The strength of the Pondicherry Civil Service was subsequently increased. As on 31 March 1975 it consisted of five Selection Grade posts, 29 Grade II posts apart from three posts each as deputation, leave and training reserves. Temporary additions to the Pondicherry Civil Service include three Selection Grade posts and two Grade II posts.

As regards direct recruitment, competitive examinations are held from time to time by the Public Service Commission. All recruitments by selection are carried out by a Selection Committee consisting of the Chairman or a member of the Union Public Service Commission (as Chairman), a nominee of the Ministry of Home Affairs not below the rank of a Deputy Secretary to the Government of India (member) and the Chief Secretary to the Government of Pondicherry (member).

The Tottenham system :

The Government, having felt that the then prevailing system of work in the Secretariat Departments led to delays and with a view to systematising the work relating to the disposal of papers, the classification of records and the storage of the same, introduced the Tottenham system followed in the Tamil Nadu Secretariat in the Secretariat Departments of this Administration with effect from 1 January 1968.¹⁴ Accordingly, maintaining of personal registers, numbering of tapals, maintaining of reminder diary, call registers, etc. were introduced in the office procedure for the first time in the Territory.

This system was subsequently introduced, with slight modifications, in the Non-Secretariat Departments/Offices all over the Territory with effect from 1 August 1970.¹⁵ Following the introduction of the system, the Organisation and Methods Cell of the Chief Secretariat was entrusted with the job of preparing the Office Manual for the Pondicherry Administration.

The Central Record Branch :

Prior to merger, all records used to be sent to the Archives attached to the Public Library which was declared as the Central repository of all Governmental records. Prior to this stage, the records were maintained in the respective Bureaux themselves. After merger, however, neither the old arrangement

was continued nor any new system introduced for the preservation of records. This led to accumulation of records in the various Departments and Offices. Pre-merger records in some of the Departments and offices were sent to the Archives attached to the Romain Rolland Library. But with the introduction of the Tottenham system of office administration, departments had to take steps for the preservation and destruction of records.

The Central Record Branch may be regarded as having come into existence on 1 January 1968 i.e. from the date of introduction of the Tottenham system in the Secretariat Departments. It became the repository of the files of the entire Secretariat (except those of the Legislative Secretariat).¹⁶ All confidential and secret records are maintained by the respective departments. From 17 November 1972 the Central Record Branch functioned as a unit of the Organisation and Methods Cell.

With the extension of the Tottenham system of office administration to the Non-Secretariat Departments with effect from 1 August 1970, the Non-Secretariat Departments had to set up Internal Record Sections in their respective Departments or Offices.¹⁷

Inspection Cell/Organisation and Methods Cell :

In order to ensure uniformity in office administration, streamline procedure, eliminate delays in disposals and tone-up efficiency in all respects, an Inspection Cell at the Secretariat level was created in 1969 with a Special Officer to be in immediate charge of the Cell under the direct control, guidance and supervision of the Chief Secretary to Government. The Cell carried out annual inspection of all offices in Pondicherry and the Offices of the Administrators in the outlying regions.

It is the responsibility of the Organisation and Methods Cell to initiate, streamline and sustain office procedure for improving administrative efficiency and curtailing delays. The Cell prepares administrative notes of inspection, studies questions relating to the staff pattern and organisation, distribution of work, work load, avoidable over-lapping of functions, rational grouping of activities, flow of authority etc. in the various Government Departments.¹⁸

The Gazette :

The **Archives Administratives des Etablissements Français dans l'Inde** which appeared in the French establishments as early as 1823 may be taken as the oldest version of a Gazette in Pondicherry. Important laws, ordinances, rules, etc. were published in these issues. From January 1828 onwards they came to be published under the title of **Bulletin des Actes Administratifs des Etablissements Français dans l'Inde**. From 1872 it started appearing as **Bulletin Officiel des Etablissements Français dans l'Inde**. Since 1911 it appeared under the title of **Journal Officiel des Etablissements Français dans l'Inde** as a weekly. Soon after *de facto* transfer of the territories, it started appearing as **La Gazette de l'Etat de Pondichéry** or the Gazette of Pondicherry. While before merger, it carried material in French and Tamil, after merger material in Tamil, English and French are published.

Administration Report :

The practice of publishing an administration report every year covering all activities of the various departments and offices of the Administration does not appear to have been in vogue before merger. However, individual departments such as **Travaux Publics** and **Bureau de Santé** have been bringing out annual reports giving very detailed information of their departmental activities. Such reports seem to have been published more at the initiative of individual officials than as a matter of Government policy. The practice of publishing Administration Reports covering the activities of all Departments was introduced soon after merger and the first report which appeared pertained to the year 1956-57. Since then Administration Reports have been appearing regularly.

The Estimates Committee had, in the meanwhile, called upon some of the Departments / Directorates / Offices it had inspected to bring out separate Administration Reports exclusively covering their own activities.

The Year Book:

The **Annuaire des Etablissements Français dans l'Inde** may be taken as the nearest version of an 'Year Book' published in Pondicherry before merger. Although these **Annuaire**s came to be published only from the year 1850, they were preceded by the publication of an **Almanac**. From the preface of the **almanac** of 1838, it would appear that almanacs must have been published even prior to that. Besides astronomical and meteorological data, the almanacs

contained a brief account of the history of Pondicherry, information on temples, festivals, public holidays, seasonal occupations in the rural areas, particulars of weights and measures in vogue and a list of civil servants together with the details of administrative set-up in the French establishments. These almanacs seem to have appeared only upto 1846. Since 1850, the *Annales* started carrying all the information previously published in the almanac. Once in several years, the *Annales* carried a compilation of selected laws, rules and regulations of public importance. The *Annales* continued to appear till 1943.

Civil list:

To begin with, the Almanacs and since 1850 the *Annales* published a list of all civil servants in the former French establishments in India upto 1943. No separate Civil List for this territory has been published after merger although as a subject it stands allotted to the General Administration Department together with the History of Services. The Civil List published by the Government of India included also the names of officers of this Administration.

Administrators of the outlying regions:

The Administrators are not only the representatives of the Administration in the outlying regions but also the chief executives responsible for the smooth functioning of every branch of administration there. As such, they shoulder a heavy responsibility in maintaining law and order and also in ensuring the all-round progress of the regions.

Here it may be useful to recall that under the Royal Ordinance of 23 July 1840 they were placed under the direct control of the Governor. However, no specific instructions or guidelines were issued to help them perform their functions. This often led to clashes between the Administrator and *Ordonnateur Directeur de l'Intérieur*, calling for the Governor's direct intervention. The *décret* of 12 July 1887 sought to remedy this situation by defining their duties and responsibilities.¹⁹ The Governor's circular of 20 October 1891 reiterated the provisions contained in the decree of 12 July 1887 and empowered the Administrators to correspond directly with the *Chefs d'Administration* or *Chefs de Service* (Heads of Departments/Offices) instead of routing it through the Governor with a view to cutting down delays. On all matters which called for a decision at the headquarters, the Administrators were required to study the subject carefully and to furnish a report thereon to facilitate the authorities to give their final decision promptly.²⁰

The position remained almost the same at the time of merger. But following the enactment of the Government of Union Territories Act, 1963 (No. 20 of 1963), the Confidential and Cabinet Department held by the Chief Secretary came to exercise control over the Administrators of Karaikal, Mahe and Yanam in accordance with the Business of the Government of Pondicherry (Allocation) Rules, 1963.

The Administrators, being the official representatives of the Lieutenant-Governor in the outlying regions, are bound to stay at headquarters in the 'Government House'. The Government House, being also the administrative headquarters of the region, is guarded by the police day and night and the national flag is flown from 6 a. m. to 6 p. m. every day. On Republic Day as well as on Independence Day, a guard of honour is presented to the Administrator who takes the salute at the march past. They receive high officials and foreign dignitaries visiting the region on behalf of the Lieutenant-Governor and deal with the press directly. Each of the Administrator is provided with the facility of a conveyance to attend to his official functions.

While functions of some of the Departments/Offices are attended to by their regional units, those of the remaining Departments/Offices are looked after by the Administrators themselves who are assisted by staff paid by the respective Departments/Offices at headquarters. The Administrators have their own staff to assist them in carrying out their special functions. As the Chief Executives of the region, they exercise control over all Government establishments in the region. In accordance with the provisions of the Delegation of Financial Powers Rules, 1958, they are conferred with the powers of Heads of Departments²¹ in the region and perform the functions of Drawing Officer in respect of the staff working in the Administrator's Office, the Office of the Deputy Collector (Revenue), the Sub-Treasury and Block Development Office.

The Administrators exercise a wide range of powers under the various provisions of law. They function as Sub-Divisional Magistrates under the Criminal Procedure Code with jurisdiction extending over the entire region. there are Deputy Collectors (Revenue) for purposes of revenue administration and exercise the powers of the Collector under the Land Reforms Act, 1968, the Pondicherry Revenue Recovery Act, 1970 and the Land Acquisition Act, 1894 (Central Act). They perform the functions of Deputy Commissioner (Excise) under the Pondicherry Excise Act. They exercise some limited control over the

Sub-Treasuries located in the region. All communications between officials stationed in the region and headquarters, as a matter of convention, routed through the Administrator who forwards them to the officials concerned with his own remarks wherever necessary.

The Administrator could proceed on casual or earned leave only with the prior sanction of the Chief Secretary. In any case, he could leave headquarters only after handing over charge to an officer next to him in rank who attends to the current duties of the Administrator in his absence.



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APPENDIX—1

TREATY OF CESSION OF THE FRENCH ESTABLISHMENTS OF
PONDICHERRY, KARAIKAL, MAHE AND YANAM

PREAMBLE

The President of the French Republic

and

The President of the Indian Union

Considering that their Governments, faithful to the common declaration made in 1947 and desirous of strengthening the bonds of friendship established since then between France and India, have manifested their intention of settling amicably the problem of the French Establishments in India.

Considering that after the wish of these populations had been expressed by their representatives an agreement was concluded on the 21st October 1954, transferring the powers of the Government of the French Republic to the Government of the Indian Union.

Have decided to conclude a treaty establishing the cession by the French Republic to the Indian Union of the French Establishments of Pondicherry, Karaikal, Mahe and Yanam and to settle the problems stemming therefrom and have designated thereto as their plenipotentiaries :

The President of the French Republic :

H. E. Mr. Stanislas Ostrorog, Ambassador Extraordinary and Plenipotentiary of France in India.

The President of India :

Jawaharlal Nehru, Minister for External Affairs who, after exchanging their credentials, which having been found in legal form, have agreed as follows :

ARTICLE 1

France cedes to India in full sovereignty the territory of the Establishments of Pondicherry, Karaikal, Mahe and Yanam.

ARTICLE 2

These Establishments will keep the benefit of the special administrative status which was in force prior to the 1st November 1954. Any constitutional changes in this status which may be made subsequently shall be made after ascertaining the wishes of the people.

ARTICLE 3

The Government of India shall succeed to the rights and obligations resulting from such acts of the French administration as are binding on these Establishments.

ARTICLE 4

French nationals born in the territory of the Establishments and domiciled therein at the date of the entry into force of the Treaty of Cession shall become nationals and citizens of the Indian Union, with the exceptions enumerated under Article 5 hereafter.

ARTICLE 5

The persons referred to in the previous article may, by means of a written declaration drawn up within six months of the entry into force of the Treaty of Cession, choose to retain their nationality. Persons availing themselves of this right shall be deemed never to have acquired Indian nationality.

The declaration of the father, or if the latter be deceased, of the mother, and in the event of the decease of both parents, of the legal guardian shall determine the nationality of unmarried children of under eighteen years of age. Such children shall be mentioned in the aforesaid declaration. But married male children of over sixteen years of age shall be entitled to make this choice themselves.

Persons having retained French nationality by reason of a decision of their parents, as indicated in the previous paragraph, may make a personal choice with the object of acquiring Indian nationality by means of a declaration signed in the presence of the competent Indian authorities, within six months of attaining their eighteenth birthday. The said choice shall come into force as from the date of signature of the declaration.

The choice of a husband shall not affect the nationality of the spouse.

The declarations referred to in the first and second paragraphs of this Article shall be drawn up in two copies, the one in French, the other in English, which shall be transmitted to the competent French authorities. The latter shall immediately transmit to the competent Indian authorities the English copy of the aforesaid declaration.

ARTICLE 6

French nationals born in the territory of the Establishments and domiciled in the territory of the Indian Union on the date of the entry into force of the Treaty of Cession shall become nationals and citizens of the Indian Union. Notwithstanding, they and their children shall be entitled to choose as indicated in Article 5 above. They shall make this choice under the conditions and in the manner prescribed in the aforesaid Article.

ARTICLE 7

French nationals born in the territory of the Establishments and domiciled in a country other than the territory of the Indian Union or the territory of the said Establishments on the date of entry into force of the Treaty of Cession shall retain their French nationality, with the exceptions enumerated in Article 8 hereafter.

ARTICLE 8

The persons referred to in the previous Article may, by means of a written declaration signed in the presence of the competent Indian authorities within six months of the entry into force of the Treaty of Cession, choose to acquire Indian nationality. Persons availing themselves of this right shall be deemed to have lost French nationality as from the date of the entry into force of the Treaty of Cession.

The declaration of the father or, if the latter be deceased, of the mother, and in the event of the decease of both parents, of the legal guardian shall determine the nationality of unmarried children of under eighteen years of age. Such children shall be mentioned in the aforesaid declaration. But, married male children of over sixteen years of age shall be entitled to make this choice themselves.

Persons having acquired Indian nationality by reason of a decision of their parents, as indicated in the previous paragraph, may make a personal choice with the object of recovering French nationality by means of a declaration signed in the presence of the competent. French authorities within six months of attaining their eighteenth birthday. The said choice shall come into force as from the date of signature of the declaration.

The choice of a husband shall not affect the nationality of the spouse.

The declarations referred to in the first and second paragraphs of this Article shall be drawn up in two copies, the one in French, the other in English and shall be signed in the presence of the competent Indian authorities who shall immediately transmit to the competent French authorities the French copy of the aforesaid declaration.

ARTICLE 9

With effect from the 1st of November 1954 the Government of India shall take in their service all the civil servants and employees of the Establishments, other than those belonging to the metropolitan cadre or to the general cadre of the France d'Outre-Mer Ministry. These civil servants and employees including the members of the public forces shall be entitled to receive from the Government of India the same conditions of services, as respects remuneration, leave and pension and the same right as respects disciplinary matter or the tenure of their posts, or similar rights as changed circumstances may permit, as they were entitled to immediately before the 1st November 1954. They shall not be dismissed or their prospects shall not be damaged on account of any action done in the course of duty prior to the 1st November 1954.

French civil servants, magistrates and military personnel born in the Establishments or keeping their family links shall be permitted to return freely to the Establishments on leave or on retirement.

ARTICLE 10

The Government of France shall assume responsibility for payment of such pensions as are supported by the Metropolitan Budget, even if the beneficiaries have acquired Indian nationality under Articles 4 to 8 above. The Government of India shall assume responsibility for the payment of pensions, allowances and grants supported by the local budget. The system of pensions of the various local Retirement Funds shall continue to be in force.

ARTICLE 11

The Government of India shall take the necessary steps to ensure that persons domiciled in the Establishments on the 1st of November 1954 and at present practising a learned profession therein shall be permitted to carry on their profession in these Establishments without being required to secure additional qualification, diplomas or permits or to comply with any new formalities.

ARTICLE 12

The administration's charitable institutions and loans offices shall continue to operate under their present status, and shall not be modified in the future without ascertaining the wishes of the people. The present facilities granted to the private charitable institutions shall be maintained and shall be modified only after ascertaining the wishes of the people.

ARTICLE 13

Properties pertaining to worship or in use for cultural purposes shall be in the ownership of the missions or of the institutions entrusted by the French regulations at present in force with the management of those properties.

The Government of India agree to recognise as legal corporate bodies, with all due rights attached to such a qualification, the "Conseils de fabrique" and the administration boards of the Missions.

ARTICLE 14

Legal proceedings instituted prior to the 1st November 1954 shall be judged in conformity with the basic legislation and procedure in force at that time in the Establishments.

To this end, and up to final settlement of such proceedings, the existing courts in the Establishments shall continue to function. Officers of the Court shall be law graduates, habitually domiciled in the Establishments, honourably known and selected in accordance with the French regulations governing the designation of temporary judicial officers.

The interested parties shall be entitled, if they so decide by common agreement, to transfer to the competent Indian Courts, the said proceedings as well as proceedings which, though already open, are not yet entered with the Registers of the French Courts, and also proceedings which constitute an ordinary or extraordinary appeal.

Judgments, decrees and orders passed by the French Courts, prior to the 1st of November 1954, which are final or may become so by expiration of the delays of appeal, shall be executed by the competent Indian authorities. Judgments, decrees and orders passed after the 1st of November 1954 in conformity with the first paragraph of the present article shall be executed by the competent Indian authorities, irrespective of the Court which exercise the jurisdiction.

Acts or deeds constitutive of rights established prior to the 1st of November 1954 in conformity with French law, shall retain the value and validity conferred at that time by the same law.

The records of the French Courts shall be preserved in accordance with the rules applicable to them on the date of cession, and communication of their contents shall be given to the duly accredited representatives of the French Government whenever they apply for such communication.

ARTICLE 15

The records of the Registrars Offices upto the date of cession, shall be preserved in accordance with the rules applicable to them on that date and copies or extracts of the proceedings shall be issued to the parties or the authorities concerned.

The personal judicial records of the Courts Registries upto the date of cession, shall be preserved in accordance with the rules applicable to them on that date and copies or extracts of these records shall be issued on request to the French authorities and likewise to the persons concerned in accordance with that legislation in force prior to the 1st of November 1954.

The said requests on the part of the French authorities and likewise the copies addressed to them shall be drawn up in the French language and shall entail no reimbursement of costs.

The French and Indian authorities shall mutually inform each other of penal sentences involving registration in the record of convictions of their own territory and pronounced either by French judicatures or by judicatures sitting in territories ceded to India concerning nationals of the other country born in the aforesaid territories.

Such information shall be sent free of charge through diplomatic channels, either in French or together with a translation in French.

ARTICLE 16

The provisions of article 14 of this Treaty shall apply to proceedings which the "Conseil du Contentieux Administratif" is competent to deal with.

Temporary magistrates and local civil servants selected in accordance with the principles of the second paragraph of the said article 14 shall compose this body.

ARTICLE 17

Nationals of France and of the French Union, domiciled in the French Establishments on the 1st of November 1954, shall, subject to the laws and regulations in force for the time being in the Establishments enjoy in these Establishments, the same freedom of residence, movement and trade as the other inhabitants of the Establishments.

ARTICLE 18

All persons of French nationality acquired under Articles 4 to 8 or in any other manner and all French corporate bodies shall be permitted to repatriate freely their capital and properties over a period of ten years from the 1st of November 1954.

ARTICLE 19

The Government of India takes the place of the territory, with effect from the 1st of November 1954, in respect of all credits, debts and deficits in the care of the local administration. Therefore, the Government of India shall immediately reimburse to the French Government the amount of Treasury loans and various funds placed by the latter at the disposal of the territory, as well as advances made by the "Caisse Centrale de la France d'Outre-Mer", with the exception of sums remitted as grants. In addition the Government of India shall pay the indemnity agreed upon by the two Governments for the purchase of the Pondicherry power station.

Simultaneously, the French Government shall reimburse to the Indian Government the equivalent value at par in £ sterling or in Indian Rupees of the currency withdrawn from circulation from the Establishments before the 1st of November 1955.

ARTICLE 20

The Indian Government agree to the continuation of the French institutions of a scientific or cultural character in existence on 1st of November 1954 and by agreement between the two Governments to the granting of facilities for the opening of establishments of the same character.

ARTICLE 21

The "College Français de Pondichery" shall be maintained in its present premises as a French educational establishment of the second degree with full rights. The French Government shall assume the charge of its functioning as well in respect of the selection and salaries of the staff necessary for management, teaching and discipline as in respect of the organisation of studies, syllabi, and examinations and the charge of its maintenance. The premises shall be the property of the French Government.

ARTICLE 22

Private educational institutions in existence on the 1st of November 1954 in the French Establishments shall be allowed to continue and shall be permitted to preserve the possibility of imparting French education. They shall continue to receive from the local authorities subsidies and other facilities at least equal to those which were being granted on the 1st November 1954.

They will be permitted to receive without obstruction the aid which the French Government in agreement with the Government of India may desire to give them.

ARTICLE 23

The French Government or French recognised Private Organisations shall be allowed to maintain and to create by agreement between the two Governments in the former French Establishments in India, establishments or institutions devoted either to higher studies leading to diplomas of French language, culture and civilisation, or to scientific research or to the spreading of French culture in the Sciences, Arts or Fine Arts. The Indian Government shall grant every possible facility, subject to their laws and regulations in force for entry into and residence in India to members of French Universities sent by the French Government for a study visit or a teaching mission to India.

ARTICLE 24

The French Institute of Pondicherry, set up by an understanding reached between the two Governments since the 21st October, 1954 Agreement and inaugurated on the 21st March 1955, shall be maintained as a research and advanced educational establishment. The Indian Government shall provide such suitable facilities to further the development of the activities of the said Institute, as agreed upon between the two Governments from time to time.

ARTICLE 25

Equivalences of French diplomas and degrees awarded to persons belonging to the French Establishments viz. "Baccalauréat", "brevet élémentaire" "brevet d'études du premier cycle" with diplomas and degrees awarded by Indian Universities will be accepted by the Indian Government for admission to higher studies and administrative careers. These equivalences will be fixed according to the recommendations of the Joint Educational Committee, nominated by the two Governments in accordance with the Agreement of the 21st October 1954. This shall apply equally to degrees in law and medicine awarded in the Establishments.

Degrees of a purely local character shall be recognised under usual conditions.

ARTICLE 26

The French Government cedes to the Government of India all properties owned by the local administration of the Establishments with the exception of such property as enumerated in Article 8 of the annexed Protocol.

Properties which are at present in possession of the religious authorities shall be retained by them and the Government of India agree, whenever necessary, to convey the titles to them.

ARTICLE 27

The French Government shall keep in their custody the records having an historical interest; the Government of India shall keep in their custody the records required for the administration of the territory.

Each Government shall place at the disposal of the other lists of records in its possession and copies of such records as are of interest to the other.

ARTICLE 28

The French language shall remain the official language of the Establishments so long as the elected representatives of the people shall not decide otherwise.

ARTICLE 29

All questions pending at the time of the ratification of Cession shall be examined and settled by a French Indian Commission composed of three Representatives of the French Government and three Representatives of the Indian Government.

ARTICLE 30

Any disagreement in respect of the application or interpretation of the present Treaty which cannot be resolved through diplomatic negotiation or arbitration shall be placed before the International Court of Justice at the request of one or other of the High Contracting Parties.

ARTICLE 31

The French and English texts of the presented Treaty shall be equally authentic. The present Treaty shall enter into force on the day of its ratification by the two Governments concerned. The exchange of instruments of ratification shall take place at New Delhi.

The present Treaty shall be deposited in the archives of the Government of India, which shall transmit an attested copy to the Government of the French Republic.

Done in duplicate at New Delhi this twenty-eighth day of May 1956 A.D.

(Sd.) JAWAHARLAL NEHRU,

Prime Minister and Minister for
External Affairs.

(Sd.) S. OSTROROG,

Ambassador Extraordinary
and
Plenipotentiary of France in India

ANNEXED PROTOCOL

ARTICLE 1

As regards the communes of Nettapacom and Tirubuvane which are part of the Establishment of Pondicherry and as regards the Establishment of Pondicherry and as regards the Establishments of Yanam and Mahe the French Government shall not be responsible, particularly in respect of Articles 3, 9 and 19 of the Treaty, for any acts done in these communes and Establishments with effect from the date shown against each:

- | | | |
|------------------|-------|-------------------|
| — for Nettapacom | .. .. | on March 31, 1954 |
| — for Tirubuvane | .. .. | on April 6, 1954 |
| — for Yanam | .. .. | on June 13, 1954 |
| — for Mahe | .. .. | on July 16, 1954 |

ARTICLE 2

The sets of courses of studies at present in force shall be maintained during the appropriate transitional period in a sufficient number of educational institutions so as to ensure to the people concerned a possibility of option for the future.

ARTICLE 3

Transitory periods shall be provided for in every course of studies.

All pupils and students now engaged in a course of studies are given the assurance that they will be able to complete their studies in French according to the curricula and methods in force on the 1st November 1954. They shall continue to enjoy the facilities which they enjoyed on that date, especially regarding free education, and scholarships granted by local authorities, whether these scholarships be valid in the Establishments or in France.

ARTICLE 4

Regarding the organisation of the examinations of College Français and the French Institute every facility shall be given to the representatives of the French Government concerning visas and sojourn as well as practical dispositions to be taken for holding the examinations. The French Government retains the authority to select and appoint examination boards.

ARTICLE 5

Scholarships for the completion of studies leading to the "Licence en Droit" and "Doctorat en Médecine" when begun before the 1st of November 1954, shall be granted on request to the students of the former Law College and of the former Medical College. If should they so prefer, medical students shall have the possibility to be admitted into Indian Medical Colleges for completion of their studies, after being given due credits for their previous medical studies.

ARTICLE 6

The Government of India will reimburse to the personnel of educational and cultural establishments whose salaries are paid by the French Government, an amount equal to the Indian Income Tax paid by them unless it is covered by double Income Tax avoidance agreement between India and France.

ARTICLE 7

If French books, publications and periodicals as well as educational and teaching equipment and other cultural material intended for use in French Institute and Collège Français, are subject to import duty or other taxes, an amount equivalent to the sum so paid shall be reimbursed by the Government of India to the institutions concerned.

ARTICLE 8

The Government of India recognises as being in the ownership of the French Government the following properties :

- 1 - Property located in rue de la Marine (for the installation of the French Consulate) ;
- 2 — Properties located on the rue Victor Simonel which are occupied by the "Collège Français de Pondichéry,";
- 3 — the War Memorial ;
- 4 — Property No. 13 located at Karaikal so called "Maison Lazare" (for the installation of a branch of the French Consulate);
- 5 — Property located on the rue Saint Louis (for the Institute).

ARTICLE 9

No one shall be prosecuted on account of political offences committed prior to the 1st of November 1954 and against whom no prosecution has been instituted on the said date.

MINISTRY OF EXTERNAL AFFAIRS

New Delhi, May 28, 1956

Excellency,

With reference to Article 25 of the Treaty of Cession of the Territory of the French Establishments in India consisting of Pondicherry, Karaikal, Mahe and Yanam, I have the honour to recall a clarification given during the negotiations. So far as admission to higher studies in the Indian Universities and admission to administrative careers under the State Governments are concerned, the Government of India cannot take a decision in this regard on behalf of Indian Universities which are autonomous bodies and of State Governments which are solely responsible for recruitment of their personnel.

Nevertheless, the Government of India while agreeing to accept the equivalences for admission to administrative careers under the Central Government shall recommend such equivalences to Indian Universities and State Government and endeavour to secure a favourable decision.

Accept, Excellency, the renewed assurances of my highest consideration.

JAWAHARLAL NEHRU,
Minister for External Affairs.

His Excellency,
Mr. Stanislas Ostrorog,
Ambassador of France,
New Delhi.

EMBASSY OF FRANCE IN INDIA

New Delhi, the 28th May, 1956

Excellency,

I have the honour to refer to your letter dated the 28th May, 1956, in which you have stated as follows :

“With reference to Article 25 of the Treaty of Cession of the Territory of the French Establishments in India consisting of Pondicherry, Karaikal, Mahe and Yanam, I have the honour to recall a clarification given during the negotiations. So far as admission to higher studies in the Indian Universities and admission to administrative careers under the State Governments are concerned, the Government of India cannot take a decision in this regard on behalf of Indian Universities which are autonomous bodies and of State Governments which are solely responsible for the recruitment of their personnel.

Nevertheless the Government of India while agreeing to accept the equivalences for admission to administrative careers under the Central Government shall recommend such equivalences to Indian Universities and State Governments and endeavour to secure a favourable decision.”

2. The abovementioned position is acceptable to the Government of the Republic of France and your letter referred to above and this acknowledgment will constitute an agreement in this matter between our two Governments.

Accept, Excellency, the renewed assurances of my highest consideration.

S. OSTROROG,
Ambassador of France.

His Excellency
Mr. Jawaharlal Nehru,
Prime Minister and Minister for External Affairs,
Government of India,
New Delhi.

APPENDIX—II
GOVERNMENT OF PONDICHERRY

Pondicherry, the 1st July, 1963.

The following notification of the Government of India is republished in the State Gazette for information of the public.

The Business of the Government of Pondicherry (Allocation) Rules, 1963.

S. S. SHETTY,
Secretary.

GOVERNMENT OF INDIA

Ministry of Home Affairs

No. F. 10/5/63-SR(R)-I

New Delhi-11, the 1st July 1963.

NOTIFICATION

In exercise of the powers conferred by article 239 of the Constitution and section 46 of the Government of Union Territories Act 1963 (20 of 1963), and all other powers enabling him in that behalf, and in supersession of the existing rules and orders on the subject, the President is pleased to make the following rules, namely :—

1. *Short title* : These rules may be called the Business of the Government of Pondicherry (Allocation) Rules, 1963.

2. *Definitions* : In these rules, unless the context otherwise requires,—

- (a) “the Act” means the Government of Union Territories Act, 1963 (20 of 1963);
- (b) “the Administrator” means the Administrator of the Union Territory of Pondicherry ;
- (c) “the Council” means the Council of Ministers appointed under section 44 of the Act ;
- (d) “the Government” means the Government of the Union Territory of Pondicherry ;
- (e) “Secretary” means a Secretary in a Department and includes Secretary to the Administrator, and the Chief Secretary; and
- (f) “Schedule” means a schedule appended to these rules.

3. *Allocation of subjects to departments, etc.* : The entire business of the Government shall be transacted in the Departments and Offices (all of which are hereinafter referred to as “Departments”) specified in the schedule and shall be classified and distributed between these Departments and Offices as laid down therein;

Provided that the Administrator may, from time to time, make such additions to, or modifications in the list of business allotted to a Department as he thinks fit.

4. *Allocation of Departments among Ministers* : The Administrator shall, in consultation with the Chief Minister, allocate to the Ministers so much of business of the Government as relates to matters with respect to which the Council is required under section 44 of the Act to aid and advice the Administrator in the exercise of his functions and for that purpose assign one or more Departments to the charge of a Minister:

Provided that nothing in this rule shall prevent the assignment of one department to the charge of more than one Minister.

5. *Official head of Departments* : There shall be a Secretary for each Department who shall be the official head of that Department:

Provided that—

- (a) more than one Department may be placed in-charge of the same Secretary :
- (b) the work of a Department may be divided between two or more Secretaries.

A. N. MEHTA,
Director, Goa-Pondicherry
Ministry of External Affairs.

SCHEDULES

(See rule 3)

I. CONFIDENTIAL AND CABINET DEPARTMENT

1. Political and Confidential matters.
2. Meetings of Cabinet and action on decisions thereof.
3. Co-ordination of work of various Departments.
4. Rules of Business of Government.
5. Official Gazette.
6. Anti-corruption and Vigilance.
7. Control over Administrators, Karaikal, Mahe and Yanam.

II. HOME DEPARTMENT

1. Police.

- (a) All matters relating to Police Organisation of Pondicherry including armed Police.
- (b) Maintenance of public security, peace, order and tranquility.
- (c) State Police Wireless.
- (d) Arms, fire arms and ammunition.

2. Matters connected with Defence of India Act and Rules.

3. All matters connected with military.

4. Jails and Borstal institutions and Lunatics.

III. APPOINTMENTS DEPARTMENT

1. Salaries and Allowances of Ministers, including Establishment of Council of Ministers.

2. Matters relating to recruitment, probation, training, posting, transfer etc. of officers, Ministerial and Class IV Staff of Secretariat Departments.

3. Appointment of Administrators, Karaikal, Mahe and Yanam.

4. References from other Departments on all service matters requiring the Administrator's orders and advice on the general service questions.

5. Recruitment to Ministerial posts in the attached offices and inter-department transfers and promotions.

6. Discipline and appeal relating to the services.

7. Civil list and History of Services.

8. References to Union Public Service Commission.

9. Recognition of Service Associations.

10. Matters relating to the Establishment of the Legislative Assembly Secretariat.

11. Recruitment Rules in respect of all services.

IV. GENERAL ADMINISTRATION DEPARTMENT

1. Establishment, Budget and Accounts of the Confidential and Cabinet Department, Appointment Department, Information Department and Secretariat of the three Administrators in Karaikal, Mahe and Yanam.
2. Printing and Stationery including Government Press.
3. National Days and Ceremonial occasions.
4. Visits of V.I.Ps.
5. Extradition and Civil processes.
6. Foreigners Passports and Visas.
7. Citizenship and Naturalisation.
8. Correspondence with the Consulate—General of France in Pondicherry.
9. Transport—Administration of Motor Vehicle Act.
10. Information and Publicity.
11. Indian Cinematograph Act.
12. Press.
13. Newspapers and Periodicals.
14. Fire Service.
15. Harijan Welfare.
16. Staff Cars.
17. Telephones.
18. Liveries.
19. Recruitment to posts and training, probation, posting, transfer, etc. of officers and staff of the Department other than those within the purview of the Appointments Department.
20. Administration Reports.
21. Records.
22. Secretariat Library.
23. Office and Residential accommodation.



V. EDUCATION DEPARTMENT

1. Primary Education.
2. Secondary Education.
3. University Education.
4. Technical Education.
5. National Cadet Corps.
6. Recruitment to posts and training, probation, posting, transfer etc. of officers and staff of the Department other than those within the purview of the Appointments Department.

VI. LOCAL ADMINISTRATION DEPARTMENT

1. Municipalities (Local Bodies).
2. Civil Supplies.
3. Rationing.
4. Administration of charitable and religious endowments.
5. Food.
6. Grant to religious and cultural institutions.
7. Relief to victims of natural calamities.
8. Poor houses and Orphanages.
9. Protection of ancient and historical monuments.
10. Recruitment to posts and training, probation, posting, transfer etc. of officers and staff of the Department other than those within the purview of the Appointments Department.

VII. LABOUR DEPARTMENT

1. Employment Exchange.
2. Industrial Disputes.
3. All matters relating to Labour and Labour Laws.
4. Resettlement of Labour.
5. Employees State Insurance.
6. Recruitment to posts and training, probation, posting, transfer, etc. of officers and staff of the Department other than those within the purview of the Appointments Department.

VIII. MEDICAL AND PUBLIC HEALTH

1. Hospital and Rural Dispensaries.
2. Public Health Programmes.
3. Sanitation.
4. Recruitment to posts and training, probation, posting, transfer, etc. of officers and staff of the Department other than those within the purview of the Appointments Department.

IX. LEGISLATIVE AND JUDICIAL DEPARTMENT

1. Drafting and scrutiny of Bills and statutory Orders.
2. Administration of Justice.
3. Establishment of Courts.
4. Appeals against acquittals.
5. Legal Practitioners.
6. Civil Law and Procedure.
7. Official Receivers.
8. Notary Public.
9. Advice on all legal matters.
10. Supervision of Government Litigation.
11. Extension of Indian Enactments.
12. Judicial Reforms.
13. Legacies and Inter-State property.
14. Ex-French Laws and rules and interpretation and application thereof.
15. Recruitment to posts and training, probation, posting, transfer, etc. of officers and staff of the Department, other than those within the purview of the Appointments Department.
16. Elections.

X. PLANNING AND DEVELOPMENT DEPARTMENT

1. Five Year Plans—Planning, Implementation and Evaluation.
2. Agriculture.
3. Animal Husbandry.
4. Co-operation.
5. Fisheries.
6. Public Works.
7. Electricity.
8. Industries.
9. Port, including New Pier.
10. Community Development.
11. State and Social Welfare Advisory Board.
12. Indian Council of Child Welfare.
13. Local Development Works.
14. Statistics.

15. Recruitment to posts and training, probation, posting, transfer, etc., of officers and staff of the Department other than those within the purview of the Appointments Department.
16. Guild of Service.
17. Town Planning.
18. Creche.
19. Women's Welfare.

XI. FINANCE DEPARTMENT

1. Pay and Accounts Office and Government Treasuries.
2. Budget and Accounts of the State.
3. Rules and orders, regarding control of expenditure and Financial procedure.
4. Scrutiny of Financial sanctions.
5. Weights and Measures.
6. Interpretation of Financial and Accounts Rules.
7. Pensions and Gratuity.
8. Compassionate Funds.
9. Provident Fund.
10. Finance Committee and Public Accounts Committee.
11. Report of the Auditor-General.
12. National Savings Schemes.
13. Recruitment to posts and training, probation, posting, transfer, etc. of officers and staff of the Department other than those within the purview of the Appointments Department.

XII. REVENUE DEPARTMENT

1. Land Revenue, Land Records and Tenures.
2. Village Officers.
3. Recovery of Public Demands.
4. Lease of Government lands.
5. Acquisition and requisition of lands on behalf of Government.
6. All taxation measures and Administration and collection of all taxes.
7. Registration Department.
8. Stamps and Court-fee.
9. Recruitment to posts and training, probation, posting, transfer, etc. of officers, and staff of the Department other than those within the purview of the Appointments Department.
10. Distillery.